



TELEPHONE NUMBER:
3617 CENTRAL (3 lines).

**Established in
ENGLAND, 1859.]**

Registered as a Newspaper.

Published Weekly at 42 CANNON STREET,
LONDON, E.C.

TELEGRAPHIC ADDRESS:
"CHEMICUS, CANNON, LONDON."
[Charged as two words only.]

**Established in
[AUSTRALASIA, 1885.]**

No. 1,869. Vol. LXXXVII.

NOVEMBER 20, 1915.

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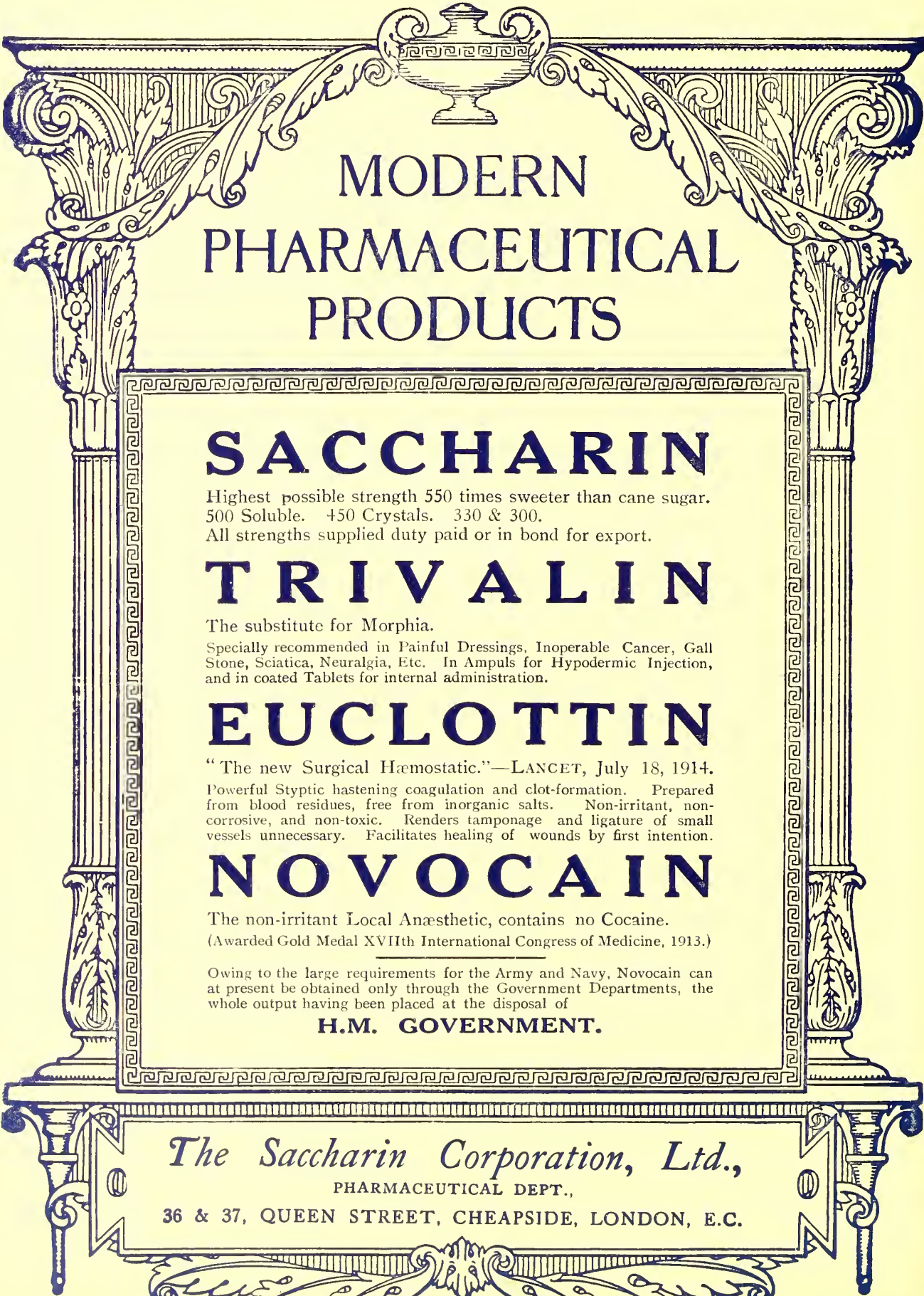
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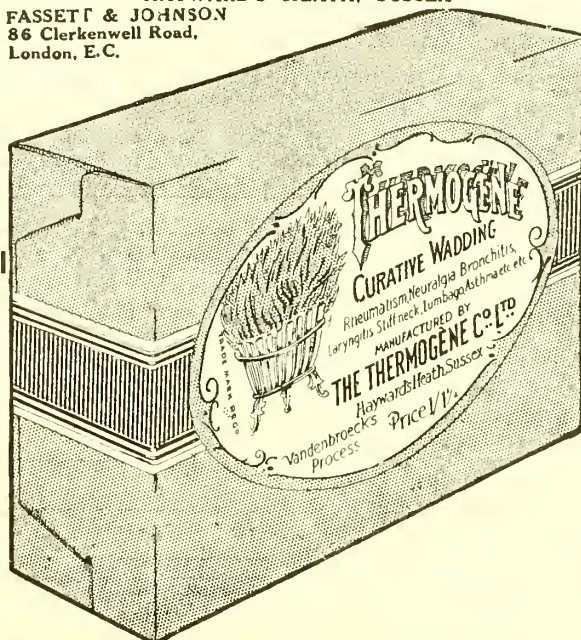
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INDEX TO ADVERTISEMENTS IN THIS ISSUE.

Table with 5 columns: Page, Name, Page, Name, Page. Lists various companies and their page numbers, such as Aerators, Ltd., Alexandre, etc.

BUYERS' GUIDE FOR GOODS ADVERTISED IN THE C. & D.

A large grid of advertisements for various products and services, including Absolute Alcohol, Acetanilide, Acetic Anhydride, Acetyl-Salicylic Acid, Ammonia & Salts, Amponic Files, Ampoules, Anesthetics, Artificial Zimbs, Baking Specialties, Balsams, Barometers, Barrels, Bath Cabinets, Bed-warmers, Beeswax, Bichromates, Biological Products, Bismuth Salts, Camphor, Cantharidin, Capsules, Capsulated Pills, Cartons, Cathart Remedy, Catheters, Caustic Soda, Cellulose Acetate, Cements, Chalk, Cellulose Plant, Chemicals, Chloroform, Chloride of Lime, Chlorodyne, Citric Acid and Citrates, Cloth Balls, Coal Tar Specialties, Cocoa, Cod Liver Oil, Combs, Condensers, Confectionery, Continental Preps., Corks, Corn Plasters, Cough Cure, Counter Adjuncts, Counter Specialties, Cream of Tartar, Crepe Bandages, Crescote, Dental Mechanics, Cyanides, Dairy Specialties, Deafness Preventive, Dental Mechanics, etc.

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In Bottles, 4/6.

THE CHARLES H. PHILLIPS CHEMICAL Co.

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with Quinine

Requires NO license

when sold by Registered Chemists and Druggists.

The Excise Authorities and the Law say so!

On Saturday, July 4, 1914, the Recorder at the Bradford Quarter Sessions **ALLOWED AN APPEAL** by Mr. Oliver Hobson, manager to Messrs. Savage & Co., Ltd., Chemists, of 658 Manchester Road, Bradford, against the decision of the Bradford Justices who had previously fined Mr. Hobson £3, and costs, for selling Wincarnis with Quinine without a wine license. In allowing the appeal, with costs, the Recorder said that **the conviction was wrong.**

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NO LICENSE IS REQUIRED

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WINCARNIS with QUININE

Owing to the increase in Patent Medicine Stamp Duty, we have been compelled to make a slight advance in the prices of Wincarnis with Quinine.

**NEW
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TO THE TRADE.

Pints, now ... 25/- per doz.
Quarts 40/- ..

TO THE PUBLIC.

Pints now ... 2/6 per bottle.
Quarts 4/- ..

HOW IS YOUR STOCK?

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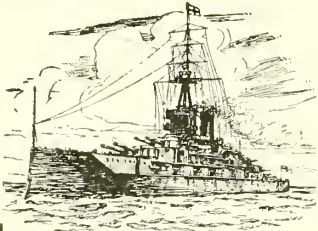
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| Bromide of Sodium | Methyl Salicylate |
| Cinchonine Sulphate and Muriate | Methyl Sulphonal |
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| Citric Acid | Pepsine |
| Cocain Hydrochlor and Puriss | Phenazone |
| Cream of Tartar | Pyrogallic Acid |
| Creosote Carbonate | Phenolphthalein |
| Formaldehyde | Potassium Sulpho-Guaiacolate |
| Gallic Acid | Quinine |
| Glycerophosphates | Salicylate of Soda |
| Heliotropin | Sugar of Milk |
| Hexamine | Tannic Acid |
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Requires Sugar and Water only.

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SHOWCARDS AND WINDOW BILLS.

Toboggan Ginger is used by a good class of people who buy it again and again.

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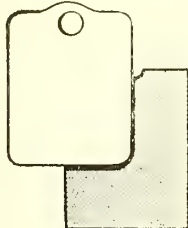
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PRIVATE BRANCH EXCHANGE

NUMBER 214

NOVEMBER 20, 1915

UNBREAKABLE MIRRORS.



A well plated article in neat khaki case, as illustrated.

Case stiffened at sides and bottom, to form stand for mirror. 16/- dozen.

Cheaper quality, 8/- dozen.

TINDER LIGHTERS.

The "Model." No matches required. With showcard. 10/6 doz.

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All metal patterns. Concave. 2/3 to 6/9 each. Tall, 5/9 to 8/9 each.

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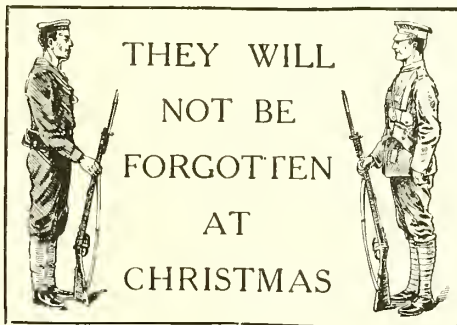
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Felt and flannel. Grey and red. Sizes 28 to 40 in. From 24/- doz.

"ACTIVE SERVICE" LINES.

Foot Powder, 24/- gross.
Camphor and Boracic Cream, 31/- gross.

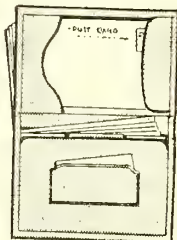


THEY WILL NOT BE FORGOTTEN AT CHRISTMAS

WRITING COMPANIONS.

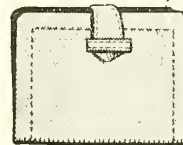
The "Aye-Ready" Letter Case in stout waterproof khaki material.

Fitted with stationery. 16/- dozen.



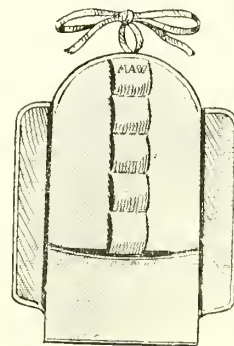
The public will not forget our sea and land and air heroes this Yuletide. See that you have what they require, inexpensive and useful gifts.

We are ready to supply them.



WATERPROOF SEATS.

Made of a stout brown waterproof sheet, 12 in. by 18 in., folding up into a handy pocket companion, 4 1/2 in. by 5 1/2 in. Just the thing for the trenches. 15/- dozen.



KHAKI HOLDALLS.

Provides space for tooth-brush, shaving soap (opportunities for further business), knife, spoon and fork. Two qualities, 9/- and 18/- doz.

An Experiment

The other day we came across a passage in "Henry Ryecroft" in which George Gissing describes how he woke one morning a little after 4 o'clock; and how he moralises thereon. "The habit of lying in bed hours after broad daylight is strange enough, if one thinks of it; a habit entirely evil; one of the most foolish changes made by modern system in the healthier life of the old time. But that my energies are not equal to such great innovation, I would begin going to bed at sunset and rising with the beam of day; ten to one it would vastly improve my health, and undoubtedly it would add to the pleasures of my existence."

Twelve months ago we decided, in the interests of our Customers, upon a little experiment.

Time evolves many changes, not the least of which is the conditions upon which modern business is conducted. The increasingly large numbers of special orders which came in at all hours, from all sources, had encroached upon the time hitherto devoted by our staff to the morning mail.

Time is inexorable, but adjustable. So we put forward the clock.

George Gissing looked upon early rising as beneficial to health. By starting our labours at 8.30 instead of 9 o'clock we found that the

extra half-an-hour gave us more time to handle the early orders, and also enabled us to devote the time gained to the urgent requirements of our Customers—a system beneficial in every way. It allows us to give that careful attention to every order, however small, which upholds the traditions of this House for giving satisfaction. The new working hours mean that, when business permits, we cease activities at 5.30 p.m. instead of 6.0 p.m.

So that the ideals of George Gissing, and the ideals of business, are at least compatible.

Capsule

TITTERTON'S

CELEBRATED

HAIR BRUSHES




GOOD PROFITS
are made by selling
TITTERTON'S
CELEBRATED
BRUSHES
(Hair, Tooth, Nail & Shaving
Brushes).

They have a world-wide reputation for excellence of quality, and perfection of workmanship. Should be stocked by all Chemists desiring to give the public the best value for money.
Illustrated Catalogue on application.

TITTERTON & HOWARD,
Brush Manufacturers,
8 & 10 Great Titchfield St., London, W.

Selling Splendidly!



THE
WHITE  CROSS
CARBOLIC
TOOTH POWDER.

CONFINED TO PHARMACISTS!

Two Sizes: 21/- and 33/- gross.
1d. Sample Tin, 7/6 gross.

The Institute of Hygiene have granted their Certificate of Merit for this article; also for the

WHITE CROSS BABY POWDER

IN DECORATED SPRINKLER TINS:
4l. doz. ; 3 doz. 3/9 ; 6 doz. 3/7 ; 12 doz. 3/3.
On the P.A.T.A. at 6d.

Showcards issued for both articles, being a reproduction of the Certificate of Merit.

Write for Samples and judge for yourself.

SHIRLEY BROTHERS, LTD.

Whitecross Works, London, S.E.

CARTONS FOR STOCK LINES



WE HAVE A LARGE VARIETY OF CARTONS IN STOCK, ONE OF WHICH WE ILLUSTRATE ABOVE. THE WORKMANSHIP IS GOOD THROUGHOUT, AND WE CAN RECOMMEND THEM TO ALL WHO WISH TO SEE THEIR GOODS WELL PACKED.

WE SHALL BE GLAD TO SEND SAMPLES OF ANY OF THE FOLLOWING CARTONS FOR

BLOOD MIXTURE
CAMOMILE
COUGH BALSAM
EMBROCATION
FRUIT SALINE
HAIR RESTORER
HYPO
LEMONADE CRYSTALS
NEURALGIA MIXTURE
SENNA
SEIDLITZ POWDERS
SYRUP OF FIGS
ETC. ETC. ETC.

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BOX MAKERS TO THE
CHEMIST TRADE

CHESTERFIELD & LONDON.

Think!!

You must stop and think, Mr. Chemist, when you see so many shopkeepers — large and small — in your own line of business, who are using National Cash Registers.



“ Nationals ” increase Trade and Profit, and the satisfaction of your fellow tradesmen is shown by the hundreds of letters we receive from them.

You cannot **expect** your business to take care of itself. When goods arrive you carefully check them with the invoice to satisfy yourself that no mistakes have been made. **Are you as careful with the money you sell the goods for?** Do you know how much **to-day's** mistakes and carelessness have cost you?

We will send you, on receipt of signed coupon, full particulars of the most suitable Cash Register for your business. You will then see how a “National” will stop mistakes and carelessness and increase your trade and profit. **Write to-day.**

Easy Terms of Payment if desired.

THE NATIONAL CASH REGISTER CO., LTD.
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Telephone:
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The National Cash Register Co., Ltd.,
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 Please send, Post Free, particulars of the National Cash
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MUNN'S—The Best!!

Finest Non-Freezing Cod Liver Oil.

NEWFOUNDLAND

Also CONGEALABLE QUALITY for manufacturing purposes, etc., in 40 gallon Barrels.

REFINED under the superintendence of a NORWEGIAN EXPERT.

Packed in 25 gallon Tin-lined Barrels.

Equals any Norwegian Oil on the Market.

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CELTOL BRITISH MADE ANTISEPTIC & DISINFECTANT

Contains commercially pure Cresol in the same proportion as does Lysol. Soluble in water, giving a clear solution, uniform throughout.

CELTYL, Disinfectant Fluid, 18-20 Co-eff.
CELTIC CROSS, Ordinary Disinfectant Fluid.
CELLOTENE, Antiseptic Liquid Soap.

Sheep Dip, Crude Carbolic Acid, Soap Powder, Domestic Liquid Soap and all other Coal Tar Products. All British made by the

CELTIC CHEMICAL CO., Petershill Road, GLASGOW.

Agents: CELTOL SUPPLY AGENCY
AUGUST REICHWALD, LIMITED

(Established 1872), Entirely British Owned and Controlled
Finsbury Pavement House, London, E.C.

SELENIUM. TELLURIUM.

These articles can be supplied in regular quantities at considerably below quoted rates. For further information apply by letter to "SELENIUM," care of—

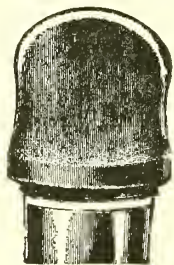
DAVIES & CO., Advert Agents, FINCH LANE, E.C.



Whilst doing our very utmost under difficult circumstances to give adequate supplies of Pocket Lamps and Refills to all our regular customers, we much regret we are at present, and probably till next January, unable to accept orders for these goods from new customers.

ARCHIBALD J. WRIGHT, Ltd.,
61 EOEN GROVE, HOLLOWAY, LONDON, N.

GATES' BOTTLE CAPPING SKINS.



SNOW-WHITE OPAQUE BAUDRUCHE SKINS.

ABSOLUTELY AS OPAQUE as Split Skins and equal in appearance
ALSO

TRANSPARENT BAUDRUCHE and WHITE SPLIT SKINS.

GOLD-BEATERS SKIN for Medical Purposes cut to any sizes; Ordinary and Waterproof.

"Mine beat all others."

Only English Manufacturer—

LESLIE GATES,
Lower Clapton,
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from OCTOBER 20, 1915.

"LINSEED COMPOUND"

(Kay's Compound Essence of Linseed)

and all the proprietary medicaments of

KAY BROTHERS, LIMITED.

| Advertised Price | Minimum Net Retail Price | Minimum Wholesale Net Price to Retailers | Price to Wholesale Dealers |
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| 9½d. | 9½d. | 8 1 | 8/6 Less |
| 13½d. | 13½d. | 11 6 | 12/- 5 % |
| 2/9 | 2/9 | 28 8 | 30/- & |
| 4/6 | 4/6 | 46/- | 48/- 10 % |
| 11/- | 11/- | 116 6 | 122/- |

For orders of £5 the discount will be 5 % off 12/- per dozen, and an additional 5 % for prompt cash.

For orders of £50 the discount will be 5 % off 12/- per dozen, and an additional 10 % for prompt cash.

Family Reference and First-Aid Book (1916) is in preparation. Applications should be now sent in with two printed labels for correct address.

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OF GENERAL PHARMACOLOGY,
8, Rue Vivienne, Paris.**

**LONDON AGENTS;
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CAPSULES of
PHOSPHOGLYCERATE
of LIME.**

**THE BEST TONIC FOR
FORTIFYING AND BUILDING UP
THE NERVOUS SYSTEM.**

*Sold by all Chemists.
Wholesale: 8, Rue Vivienne,
PARIS*

MORRHUOL CHAPOTEAUT



CAPSULES

MORRHUOL DE CHAPOTEAUT
is extracted from cod-liver oil, and
contains all its efficacious prop-
erties without the disagreeable taste.

*It cures Coughs, Bronchitis and Catarrh,
restores the appetite, and gives force to
feeble persons.*

SOLD BY ALL DRUGGISTS.

**CHANDRON'S
DROPS**

(Gouttes des Colonies)

**A harmless antiseptic
preventative against CHOLERA
FERMENTATION - INDIGESTION
& other intestinal disturbances.**

SOLD BY ALL CHEMISTS



*I find its odor exquisite and
well as charming to have recalled
by my name. Truly sincerely,
Mary Garden*

**PARFUM
MARY
GARDEN**

RIGAUD

PARFUMEUR

**16, RUE DE LA PAIX,
PARIS.**

**LONDON AGENTS;
HEPPELL & CO., 164, Piccadilly, W.**

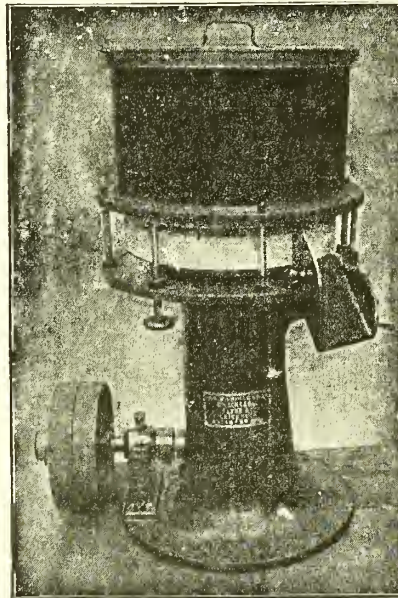
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In 7 different sizes.

Great improvements have recently been made in these machines, by which the output has been largely increased.

The strongest, simplest and most efficient Tablet Machines on the market.

GELATINE CAPSULE MACHINES for Hand or Power, for producing both types of Capsules filled with either liquid, paste or powder.



The famous "SPEEDY" Ointment Mill.

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EMULSIFIERS and all kinds of PHARMACEUTICAL MACHINERY.

S. W. WILKINSON & CO., PHARMACEUTICAL ENGINEERS.

Little Holme Street, LEICESTER.

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SOAP AND CHEMICAL PLANT MAKERS.
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SOAP & CHEMICAL BOILING PANS
STEAM JACKETED PANS
MIXING PANS
EVAPORATORS, STILL S
AND EVERY DESCRIPTION OF
SOAP AND CHEMICAL PLANT.

No 1 Plant For Experimental purposes

No 2 Plant Output 100 to 200 pounds per day

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SOAP AND CHEMICAL PLANT MAKERS.
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MILLED TOILET SOAP PLANT.
HOUSEHOLD AND LAUNDRY SOAP PLANT.
GLYCERINE EXTRACTION PLANT.
CAUSTICIZING PLANT.
TALLOW MELTING PLANT

No 8 large combined triple granite cutter mill with triple rotary cutter. Granite rollers 72 inches long 20 inches diameter

No 7 improved multiple roller mulling and mixing mill made with 10 12 or 14 rollers. This mill may be used in conjunction with our No 6 or No 7 plodder. Output 3 tons per day

No 6 Grant Bronze lined plodder for motor drive. Output 3 tons per day

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No 6 Grant Quadruple Roller Mill Output 2 tons per day

FORGROVE WRAPPING & LABELLING MACHINERY

is RENOWNED for its EFFICIENCY.

← THE REASON BRIEFLY TOLD. →



3600 WRAPPED IN FOIL AND PAPER PER HOUR WITH ONE OPERATOR.



7800 WRAPPED IN FOIL PER HOUR WITH ONE OPERATOR.

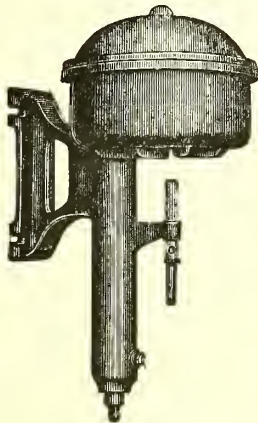
SEND US YOUR SAMPLES.

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STOKES' GAS-HEATED WATER STILL will distil half to two-thirds of a gallon per hour.

NO LICENCE NECESSARY.



ENTIRELY AUTOMATIC THEREFORE IT REQUIRES NO ATTENTION.

Most Economical & Efficient Still made.

EASILY FIXED IN A FEW MINUTES.

Only requires Gas and Water Connections.

Carriage Paid British Isles

Immediate Delivery from the Sole Agents—

THOMPSON & CAPPER, Ltd.
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ESTABLISHED 1843.
Telephone—Royal 2000. Telegrams—"Sanitas Liverpool."

Bennett, Sons & Shears,

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ENGINEERS & COPPERSMITHS,
MANUFACTURERS OF
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Auto-Claves.

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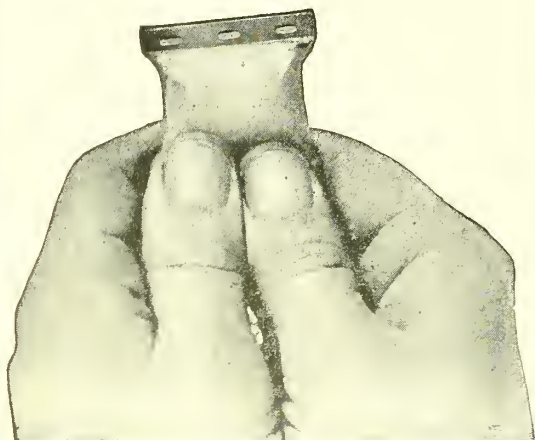
Extractors.

Distilling Apparatus.

Reflux Condensers.

INQUIRIES INVITED.

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Metal Clips for Collapsible Tubes.

These Metal Clips are made in sizes for applying to the folded ends of collapsible tubes of the following dimensions: $1\frac{3}{4}$ in., $1\frac{1}{2}$ in., 1 in., $\frac{7}{8}$ in., $\frac{3}{4}$ in., $\frac{5}{8}$ in., $\frac{1}{2}$ in., $\frac{3}{8}$ in., and $\frac{1}{4}$ in. Special sizes are also made to order.

The application of these clips to your tubes not only insures a perfect and absolutely tight seal, but also adds a finish which is exceptionally pleasing to the eye.

COLLAPSIBLE TUBE FILLERS AND CLOSERS.

TABLET MACHINES.

DELIVERY FROM STOCK.

*Sole Agents for Colton's
Pharmaceutical Machinery:*

JOHN J. GRIFFIN & SONS, Ltd.
KEMBLE STREET, KINGSWAY, LONDON, W.C.

SPECIAL PLANT FOR DRUG & CHEMICAL MANUFACTURERS

Perfume and Colour Extraction.

Reaction Autoclaves.

Essential Oils Stills.

Oils-Refining Plant.

Pure Alcohol Rectifiers.

Complete Plant for all kinds of Synthetic Drugs and Chemicals of Copper, Steel, Aluminium, etc., homogeneously lined with Lead, Silver, Tin, Nickel, etc.

Vacuum Pans and Dryers and Vacuum Stills for all purposes.

SOLE MAKERS OF

Multiplex Film Evaporators.

Imperial Drying Machines.

BLAIR, CAMPBELL & McLEAN, Ltd.
WOODVILLE STREET, GOVAN, GLASGOW.
ESTABLISHED 1838.

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VACUUM STILLS
DIGESTERS
JACKET PANS
PERCOLATORS
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PATENT STILL

FOR THE
STRENGTHENING OF
ALCOHOLIC LIQUORS
AND RECOVERY OF
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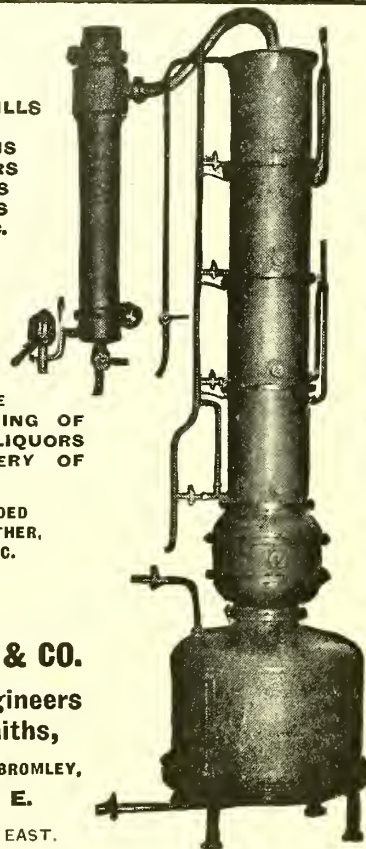
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FOR ACETONE, ETHER,
PETROL, ETC. ETC.

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Distillers' Engineers
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AFTER A CRUCIAL TEST OF 89 YEARS

CONGREVE'S ELIXIR

Maintains its High Reputation as a Preventive and Curative Agent in

CONSUMPTION,
CHRONIC BRONCHITIS and ASTHMA.
For COUGH, COLDS, WHOOPING-COUGH, Etc.,
IT IS THE STANDARD HOUSEHOLD REMEDY.

Mr. WILFRED RUTTER, M.P.S., NEWCASTLE-ON-TYNE, writes:—"I always find people speak well of your Elixir. I have been in the Drug Trade 20 years and have never found anyone speak disparagingly of your Elixir."

In 1/3, 3/-, 5/- and 12/- Bottles.

COUNTER BILLS, over Chemist's name and address, will be sent carriage paid on application to the Proprietor.

G. T. CONGREVE, COOMBE LODGE, PECKHAM, LONDON, S.E.

SAVE 3/- PER GALLON
BY BUYING
GUARANTEED GENUINE
NEWFOUNDLAND NON-FREEZING
MEDICINAL COD LIVER OIL
OF 1915 MAKE.

Highest possible quality in smell, taste and colour, comparing most favourably with the finest Norwegian. Manufactured from the finest fresh Cod Liver on same day as fish caught.

WHOLESALE ONLY.

Kindly write for sample to

JOB BROS., Manufacturers, Tower Building, LIVERPOOL.

Telegraphic Address: "JOB LIVERPOOL."

Tel. 1039 CENTRAL.

And of ST. JOHN'S, N.F.

Established 1780.

WESTMINSTER COLLEGE

The Oldest Established Private School of Pharmacy in England. Telephone: Brixton 1728.

Principals: GEORGE S. V. WILLS, Ph.C. (Founder), PERCIVAL H. WOODNOTH, M.P.S. Lady Teacher: Miss M. YOUNG.

NEXT MINOR TERM COMMENCES ON JANUARY 5, 1916.

OCTOBER PASS LIST, 1915.

ASHBY, F., Northampton
BROEL, L. M., London
DAVIES, J. M., Lower Harpton
FORD, K. E., Cobham

GRIBBS, H. L., Streatham
HARRIES, I. R., Mathry
HORE, M. G., Gillingham
LOCKE, C. M., Hove

MILES, H., Southborough
MUIR, A., London
PENMAN, J. B., Streatham
RILEY, T. F., Moore

ROSE, P., Lincoln
SMITH, F. M., Slough
WARREN, G. F., Woolwich
WARRINGTON, B., Streatham

Several Postal Students were also successful.

WILLS'S UNIVERSAL POSTAL SYSTEM.

Fee £1 1s.

For the Major, Minor, Preliminary, Apothecaries' Hall, Fairchild, Bell's Scholarship.

Minor Division.

In this division there are three courses, viz., A, B and C. Course A consists of 100 lessons.

Syllabus of Course. Fee £1 1s.

Practical Dispensing, Official and Special Pharmacy, Materia Medica, Botany (Morphology and Physiology), Organic and Inorganic Chemistry, Prescription Reading and Latin, Examination Papers, etc.

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The lessons under this Course contain, in addition to the ordinary information, special notes on the lectures delivered by Mr. WILLS in College. Students joining Course B are presented with a set of Mr. WILLS'S Text Books, post free, worth £1 5s.

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Includes, in addition to the lessons and books under Course B, lessons on Practical Chemistry and Volumetric Analysis. 40 Compound, 50 Simple and 20 Organic Powders are sent to each pupil, in addition to all the necessary Volumetric Solutions, Microscopical Slides, fresh Botanical Specimens, etc., etc.

N.B.—All Fees paid for Postal Instruction and Evening Classes are allowed when the Student enters College.

For Prospectus giving full particulars (post free) apply to the Secretary,

402 CLAPHAM ROAD, LONDON, S.W.

LONDON COLLEGE OF PHARMACY

Principal—HENRY WOOTTON, B.Sc. (Lond.)

MINOR.

Next complete Course January 5.

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Complete Course begins January 5.

Separate Class Rooms and Museum
for Lady Students.

OCTOBER EXAMINATIONS.

18 London College Students passed:
MINOR 10. APOTHECARIES' HALL 8.

The number of students who have passed the Pharmaceutical Examinations from the London College, since its establishment, exceeds that from any other school.

For Prospectus, &c., apply to The Secretary, LONDON COLLEGE OF CHEMISTRY AND PHARMACY, 461 Clapham Road, London S.W.

THE SCHOOL FOR SUCCESS!!

THE

South of England College of Pharmacy.

(Concilio et labora)

186 CLAPHAM ROAD, LONDON, S.W.

Principal—H. LUCAS, Ph.C., F.C.S.

Assistant Master—H. E. ARCHER, Ph.C.

ARRANGEMENTS FOR THE NEW YEAR.

A New Course of instruction for the Minor and Apothecaries' Hall commences on January 3, 1916. Fee £9.9.0.

Benches may now be booked.

Evening Classes are held Monday, Wednesday and Thursday, 6.30–9. Fees from 1 guinea.

Analytical Tests and Tables, by H. LUCAS, 2/- net.

For all particulars apply—The Principal.

Jan. 3

Note this date!

It may mean the day on which you commence a successful career, for our NORTHERN COLLEGE OF PHARMACY CLASSES OF PHARMACY BEGIN. Full time classes begin January 3. Part time classes begin January 4 and 5. Fees moderate. That "we train for success" has been proved.

WRITE TO-DAY FOR PROSPECTUS.

NORTHERN COLLEGE OF PHARMACY

(Prin. E. Gower Bryant, F.C.S., Ph.C., Harry Berry, F.C.S., Ph.C.)

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Requires no shaking down. Guaranteed Accurate.
A 30-Second Pushed back in an instant.
Send for list, post free.

Good Selling
Lines for
Chemists



Showing flattened bulb at end.

G. H. ZEAL, 82 Turnmill St., LONDON, E.C.

Wholesale Manufacturer of

CLINICAL THERMOMETERS.

A SELECTION OF 50 KINDS.

Established 1888.

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depend on the purity of their ingredients.

NITRATE SILVER
is the most important of these, and it happens also to be very sensitive to contamination.

A wide margin of safety has therefore always been our principle in manufacturing. Firstly, throughout the whole of our processes we use exclusively vessels made of Gold and Platinum. Secondly, all our first crystals are twice redissolved and recrystallised. Thirdly, every batch of final crystals is tested before passing into our stock.

Our guarantee of highest purity is thus assured.

Competitive Quotations on request.
Mark indents "Johnson, Matthey's."
None genuine if not labelled with our name and Trade Mark.

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MELTERS & ASSAYERS TO
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— GUARANTEED GENUINE —

White Medicinal Oils

(B.P. 1314, Paraffinum Liquidum)

Quality is the finest ever imported. Specific gravity .880/.890, which is alone recommended by the Medical profession for internal use. Lighter Oils do not have the same beneficial effect.

We have just received direct from Russia a large consignment, which is probably the last and only shipment during the War. We also have technical white oils of various specific gravities.

Samples, prices and descriptive circular on application, stating requirements.

SNOWDON, SONS & CO., LTD.,
MILLWALL, LONDON, E.

Telephone: East 433 & 434. Telegrams: "Snowdrift, Millcast, London."

FOR IMMEDIATE DELIVERY.

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BOTTLES VACUUM FLASKS

WE GUARANTEE THAT THESE BOTTLES ARE
MADE IN AMERICA BY AMERICAN WORKMEN

Not Affiliated with any German Company

ALL BOTTLES EQUALLY GUARANTEED TO
KEEP HOT THINGS HOT 30 HOURS.
KEEP COLD THINGS COLD 3 DAYS.

| Refills | | Spare Corks | |
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| Pints ... | 36/- per dozen | Pints ... | 1/6 per dozen |
| Quarts ... | 72/- per dozen | Quarts ... | 2/0 per dozen |

Sole Agents—**HENRY C. QUELCH & CO.**
4 & 5 Ludgate Square, LONDON, E.C.

May be obtained through all the London or Provincial Wholesale Houses.



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Pint size
Corrugated
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Retail 8/6 each.
Per dozen 78/0



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Quart size
Corrugated
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Pint size.
Imitation Leather
Enamelled on
Metal in Colour,
Wine, or Khaki.
Retail 4/6 each.
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Best plain
Nickel Plated.
Retail 10/6 each.
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Retail 9/6 each.
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Toogood's Packed Toilet Preparations in Collapsible Tubes.



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| No. 2629. | Toilet Lanoline | ... | 3 sizes | ... | 2/9, 3/9 and 5/6 | per doz. |
| ,, 2667. | Boracic Ointment | ... | 2 ,, | ... | 3/- and 4/6 | ,, |
| ,, 2508. | Cold Cream | ... | | ... | 3/6 | ,, |
| ,, 2509. | Vanishing Cream | ... | | ... | 3/6 | ,, |
| ,, 2542. | Shaving Cream | ... | | ... | 4/6 | ,, |
| ,, 2452. | Solid Brilliantine | ... | | ... | 6/- | ,, |

Customer's name free on 3 dozen of any one kind, and showcard supplied.

WILLIAM TOOGOOD, Ltd., 77 Southwark St., London, S.E.

HAVE YOU RECEIVED OUR
NEW CATALOGUE
Of BOTTLING, TUBE- &
TIN-FILLING MACHINES,
MIXERS, EMULSIFIERS,
ETC.

*Up-to-date Plant at Low Prices.
Something to meet every need.*

WRITE—
ROBERTS' PATENT FILLING MACHINE CO.,
33 ROUNDROFT STREET, BOLTON, ENGLAND.



Shop Heating Simplified.

The "St. Andrew" Gas-Steam Radiator solves the heating problem—doing away with elaborate, costly, and troublesome hot-water pipes, &c.; no flues, pipes, or boilers. Simple gas connection only required. Automatic regulation of gas supply, ensuring a uniform temperature and no waste of gas. Odourless, non-corrosive, and absolutely safe.

Write to-day for free Booklet,
"WARMTH AT WILL."



'St THE Andrew'
GAS STEAM RADIATORS

John Wright & Co., Essex Works, Birmingham.

ARSENIC { White, Red, Yellow.
Lump and Powder.
ARSENITES } Usual compounds and
ARSENATES } special compositions to
match samples of Sheep
Dip, Weed Killer, &c.

Oldest Brand, "Lion." Largest Works.
Only Makers of all varieties in U.K.

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GUNNISLAKE, TAVISTOCK.

T.A.—"Metalloys Gunnislake." A B C, & Lieber's Codes.

Said the Chemist to the Traveller :

"I wish all lines showed as much
profit as

EUCRYL-100%"

and very probably added,
"And I wish all lines sold
themselves," as that is assuredly
what Eucryl does.

Just think : The above is a bona-fide state-
ment straight from the purchaser to the salesman,
and who can judge better than the man behind the
counter? Articles—like people—undoubtedly have
Personality, and Eucryl has a really popular one.
Everyone who has once sampled it and realised
its worth comes again and again for it, and
remember, every time 100% profit is the result
of these repeat orders.

Don't let the discerning chemist mentioned above
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successful returns. Fill in Coupon attached.

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P. A. T. A.

EUCRYL LIMITED
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SOUTHWARK, S.E.

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61-63 LANT ST., SOUTHWARK, S.E.

Please send 6 dozen 6d. tins Eucryl Tooth
Powder, at 3/6 dozen net, **carriage paid**, together
with 2 dozen 6d. tins extra and free of charge as
bonus, for which I enclose remittance value 21/-

C. & D.

LOOFAHS!!

*I am now offering the above at
Bargain Prices:*

1 gross assorted
(1d., 2d. & 3d.) for ... **9/-**

1 gross assorted
(1d., 2d., 3d. & 4d.) for **10/6**

CASH WITH ORDER CARRIAGE PAID.

**Buy now for the season & make
250% Profit!**

THOMAS SWALES,

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89 Albion St., LEEDS.

Telephones - - - 3702 Central; 406 Headingley.

*Gun Deafness
prevented*



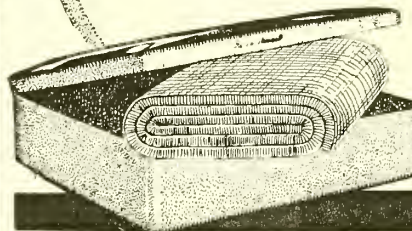
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FIBROUS PLASTICINE.

Used by the War Office and Admiralty and
by hundreds of our men in the firing line.

Harbutt's FIBROUS PLASTICINE

Strongly advertised, and put up in attrac-
tive tin boxes to retail at 6d. and 1/-.
This new line is worth your attention.

HARBUTT'S PLASTICINE, LTD.
6 Bathampton - - Bath.



PLEASE
WRITE
FOR
TERMS
AND
SAMPLES.

TINFOIL

ALL DESCRIPTIONS

COLLAPSIBLE TUBES

PLAIN OR COLOURED

METAL BOTTLE CAPSULES,

any size, colour or stamping.

ALL BRITISH MADE

Send specification of your requirements, or samples of what
you are using, stating quantities, and we will give you
BEST QUALITY, BEST DELIVERY, BEST PRICES.

LARGEST MAKERS IN THE WORLD

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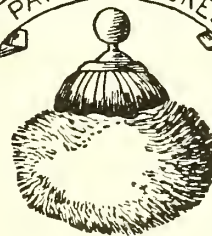
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and in Paris.

NOTE OUR TRADE MARKS, AS ABOVE.

PAPIER POUDRÉ.

| | Per doz. as heretofore. |
|---|----------------------------|
| 6d. SIZE, 2 in. x 3 in., containing 90 leaves | 3/9 |
| 1/- " 4 in. x 3 in., do. | 7/6 |
| NEAT 1/- MIRROR CASES, containing Pads of PAPIER POUDRÉ | 7/6 |
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| SMALL SIZE, DOUBLED LEAVES, for purse or glove | 1/3 |
| 6d. SHAVING PADS, containing 90 leaves | 3/9 |
| IN WHITE, ROSE, RACHEL, OR SUNBURN TINTS. | |

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**"SUNBURN
TINT."**

2/6 and 3/9 per doz.

"POPPÆA" (Regd.) PREPARATIONS.

- "POPPÆA" ROUGE, 6d. and 1/- size, 4/- and 8/- per doz. Pads. "POPPÆA" ROUGE, with Mirror, 12/- per doz.
- "POPPÆA" MASSOLINE SKIN FOOD, in Jars, 7/6 and 24/- per doz. jars. Tubes 4/- per doz.
- "POPPÆA" CIRCASSIAN CREAM, in Jars, 7/6 and 24/- per doz. jars. Tubes 4/- per doz.
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Buying and Selling Agent for leading Houses in all parts of the World.

Weekly Market Reports Mailed on request of Wholesale Buyers only.

A powerful antiseptic and deodorant.

"PETAL DUST" REGD.

The greatest of all floral air-purifiers.

A concentrated combination of the choicest flowers, aromatic herbs and roots, with the rare spices and gums of Arabia. "PETAL DUST" has been the favourite perfume of all classes for over half a century and still commands the largest sale of any dried perfume in the world.

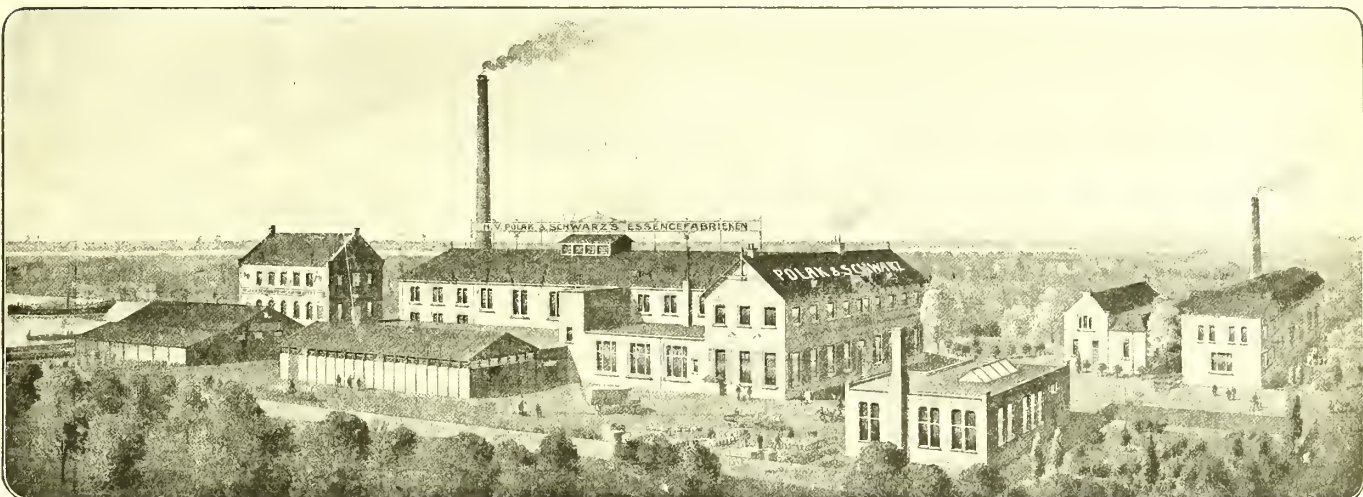
Retails in 3d. and 6d. packets

Attractive Showcards, Counter Bills, etc., with customer's name and address on each packet, for orders of 5 gross and upwards.

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STAMFORD STREET, LONDON, S.E.

CITY DEPOT: H. C. QUELCH & CO., LUDGATE SQUARE, LONDON, E.C.



THE LIST YOU WANT

IS ONE OF OUR SPECIALITIES.
THEY ARE:

SYNTHETIC PERFUMES

ALDEHYDES:

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ANTHRANILATE OF

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VIOLETS 100%

ALL KINDS OF ESTERS, &c.

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N. V. POLAK & SCHWARZ'S ESSENCEFABRIEKEN

ESTABLISHED

ZAANDAM—1889—HOLLAND

THE PREMIER Lavender Water

(ESTABLISHED 1749)

POTTER & MOORE
DISTILLERS - - MITCHAM

9d. size, 6/6 doz.
1/6 „ 13/- „
2/6 „ 22/- „
3/9 „ 33/- „
6/6 „ 54/- „
12/6 „ 96/- „



FLASKS,
9/-
per doz.

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ESSENTIAL OILS, VANILLA BEANS, DRUGS & CHEMICALS.

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| Oil Peppermint, American | Oil Sassafras, Natural |
| „ Spearmint | „ „ Artificial |
| „ Birch (Wintergreen) | „ Wormseed, Baltimore |
| „ Wintergreen Leaf | „ Wormwood, American |
| „ Cedarwood | „ Sandalwood, W.I. |
| „ Limes, Distilled | Balsam Tolu |
| „ „ H. P. | „ Copaiba |
| | „ Peru |

We solicit correspondence relating to the purchase or sale of any article used in the Drug, Perfumery or Soap Trades.

A. Boake Roberts & Co., Ltd.

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SOLUBLE ESSENCES, ESSENTIAL OILS, OIL LEMON.

If you wish to make first-class
∴ Aerated Waters, use ∴
BOAKE ROBERTS' ESSENCES.

Finest Soluble Essences :

Lemon,
Orange,
Ginger,
Ginger Ale,
Stone Ginger Beer (Cloudy),
Clear Ginger Beer,
Kola Champagne,
Lime Juice and Soda,
Lemon Squash,
Raspberry,
Strawberry,
Pineapple,
Vanilla, &c. &c.

GOLDEN CARAMEL COLOURINGS, &c.
and all sundries.

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F. M. RUDD,
Bronson,
MICHIGAN,
U.S.A.

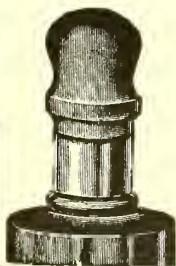
GENUINE AMERICAN PEPPERMINT OIL

"Columbia" Natural
"Diamond White"
Re-distilled.

Finest qualities for Druggists,
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Sole Consignees in United Kingdom—
R. W. GREEFF & CO.
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The Best Capping in the Whole World.



SEMREH

Self-Fixing and Air-Tight
BOTTLE CAPS

Far Superior to Pleated
Paper or Leather Cappings

PROMPT DISPATCH.

Apply now for Booklet and full particulars—
The Viscose Development Co., Ltd.
BROMLEY, KENT.

We suggest you make a Tablet Display!

The following Tablets are NOW in demand

PINETTES. Handsomely decorated Tins, to retail at $4\frac{1}{2}$ d. and $7\frac{1}{2}$ d. each. They cost 30/- and 48/- per Gross respectively.

PINE TREE LOZENGES. In labelled Tins, to retail at 3d. and 6d. each. They cost 24/- and 45/- per Gross respectively.

FORMALIN AND MINTS. In Tins for the Troops, to retail at $7\frac{1}{2}$ d. They cost 54/- per Gross.

ROYAL MINTS (Alternative labels—Scotch Mints, Irish Mints, Welsh Mints). Each Mint the equivalent to a glass of whisky in stimulating warmth. In Tins $4\frac{1}{2}$ d. and $7\frac{1}{2}$ d. each. They cost 3/- and 4/9 per Dozen respectively.

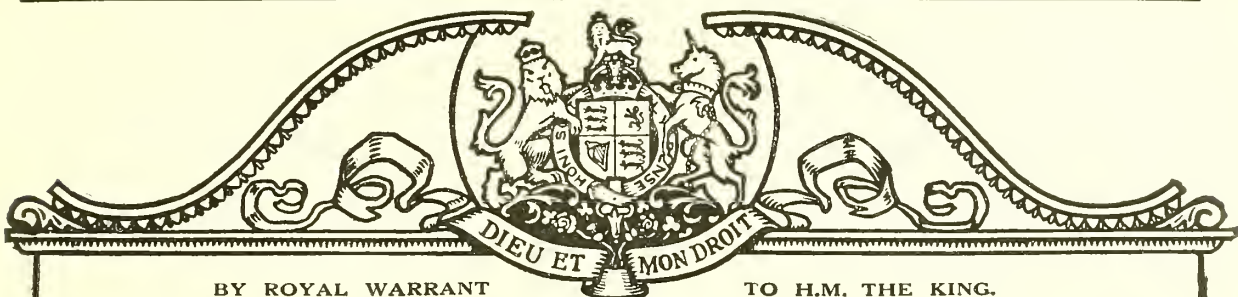
PHOSPHORUS AND QUININE TABLETS. The powerful Pick-me-up and Nerve restorative. In Tins, to retail at 1/- each. They cost 6/9 per Dozen.

GOLD CURE TABLETS. Smartly packed in the Slide Box Series. Usual retail $7\frac{1}{2}$ d. They cost 4/- per Dozen, 20/- in Box; 45/- per Gross.

| | | 25's | 50's | 100's |
|--|------|-------|-------|-------|
| | | s. d. | s. d. | s. d. |
| Cinnamon Influenza Tablets | | 3 3 | 4 6 | 8 0 |
| Chilblain Tablets | | 4 6 | 8 0 | 14 9 |
| Ammoniated Quinine Tablets, $\frac{1}{2}$ drm. | | 4 9 | 8 3 | 15 6 |
| Cascara | | 2 0 | 3 3 | 5 3 |

WE WILL CO-OPERATE WITH YOU IN WINDOW DISPLAY MATERIAL

Ayrton, Saunders & Co. Ltd.
Wholesale Druggists - Liverpool



BY ROYAL WARRANT

TO H.M. THE KING.

CROSSE & BLACKWELL'S

“UNEXCELLED”
 MEDICATED
 PREPARATIONS

Lozenges

- Brompton
- Black Currant
- Linseed L. & C.
- Pine Tree
- Poor Ben's Cough
- Hospital Cough
- C. X S. Peppermint
- Acidulated Tablets



Cachous

- Carnation
- Mixed Bouquet
- Lavender
- Lily-of-the-Valley
- Heliotrope
- Jockey Club
- Parma Violets
- Rose, etc.

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SOHO SQUARE

LONDON, W.



A GOOD LINE FOR CHEMISTS.

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FRAME FOOD

ON P.A.T.A. LIST. SHOWCARDS FREE.

FRAME FOOD CO., Standen Road, Southfields, London.

Licoricine
ACTS LIKE
FRUIT

(EST. OVER 50 YEARS)

FOR

COUGHS & COLDS,
*ASTHMA, BRONCHITIS,
WHOOPIING COUGH, &c.*



"No case too bad!"

Proprietors: MANDALL & CO., LTD.
Tower Works, Stockton-on-Tees.

CHEMISTS' HAND-CARTS,



finished in any desired colours are one of our most popular lines of manufacture.

We are also makers of
Trucks and Trolleys
of all descriptions. Also
Stretchers and Ambulances

For Illustrations and Prices write—
CREWE & CO., 1 Crown Point Rd., & Hunslet Lane, LEEDS.
And 322-4 Gray's Inn Road, London, W.C.

Lofthouse & Saltmer, Ltd.
Wholesale and Export Drug Merchants,
Manufacturing Chemists

HULL

Invite the Trade to take up the following valuable P.A.T.A. Protected Lines, bearing a very large Protected Retail Profit, which sell freely and are well known and valued by the Public in many parts of the country.


| | Protected Retail Price. | Dozen Net. |
|---|-------------------------|------------|
| * LOSALL'S SALT (well advertised), tins | 6d. | 3 6 |
| * " " " " " " | 1/- | 7/- |
| * " " " " " bottles in cartons | 1/6 | 10/6 |

* Losall's Salt sells so well, surely it must pay Pharmacists to stock such a big profit-bearing protected line.

LOSALL'S COMPOUND SULPHUR SOAP.
A valuable emollient medicated skin soap, especially suitable for use in Eczema } 1/- 8/-

Chemists requiring effective advertising matter for Losall's Salt, &c., will, on application direct to Lofthouse & Saltmer, receive a liberal supply of Dummies, Showcards, Window Slips, Price Tickets, &c., Carriage Paid, whether or no they have an account open with the Firm.

GOOD! IT'S MASON'S
The Drink for the Masses

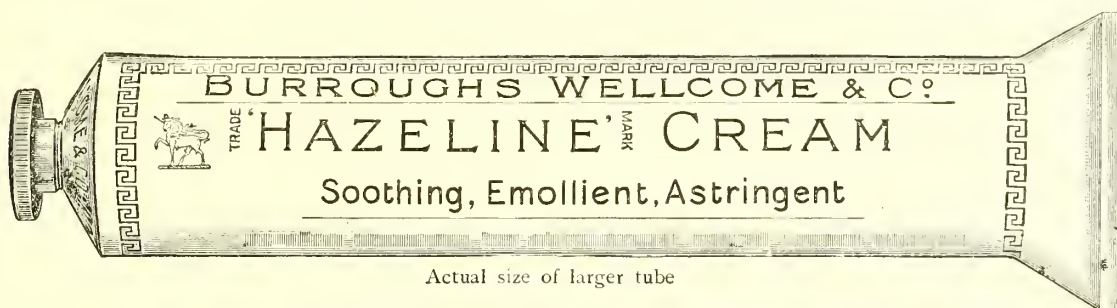


Millions of glasses used daily by workers all over the Empire

Please allow us to Sample and Quote—

Citrate Magnesia
Health Salt
Salines
Liver Salt
Blood Salt
Sulph. & Sarsap. Salt
Lemonade
Crystals, &c.

NEWBALL & MASON
NOTTINGHAM



Actual size of larger tube

'Hazeline' Cream

(Trade Mark)

For Sailors and Soldiers

Imagine the sailor with the Fleet at sea, his skin shrivelled and cracked by piercing wintry gales or chafed by frozen oilskins and soaked with salt.

Imagine the soldier, during the winter campaign, exposed for days in the trenches.

Then you will realise what comfort these men would derive from 'HAZELINE' CREAM.

It may not occur to the men's friends to send them anything of this kind.

Make the suggestion and supply the 'HAZELINE' CREAM yourself; both will be highly appreciated.

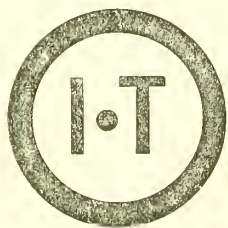


Introduce 'Hazeline' Cream to every lady customer; in all probability she has someone with the Forces who needs this soothing emollient.

'Hazeline' Cream is supplied in glass pots at 11/0 per dozen, and in collapsible metal tubes of two sizes at 6/0 and 12/0 per dozen, respectively, price subject



BURROUGHS WELLCOME & CO., LONDON



PHARMACISTS are always eager
to supply

The Original Preparation

upon which the reputation of a formula
is founded.

Warrick Brothers, Ltd., are the
originators of

IODIZED THROAT LOZENGES

which, we learn, are now being largely prescribed by
Medical Men all over the country.

The point to remember when ordering

Iodized Throat Lozenges

is that the original make are those of

Warrick Brothers, Ltd.,

Manufacturing Chemists,

Nile Street, City Road, London, N.



A Weekly Journal of Pharmacy and of the Chemical and Drug Trades
ESTABLISHED 1859.

Head Office: 42 CANNON STREET, LONDON, E. C.
Telegrams: "Chemicus, Cannon, London." Telephone 3617 Central (three lines).
Branches: ADELAIDE, MELBOURNE, AND SYDNEY, AUST.

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A column of the latest retail prices for proprietaries and medicines is given on p. 38. There is growing dissatisfaction among panel chemists in regard to the new Tariff. In Scotland they decline to go on at Mr. Robert's terms (p. 46). The whole position is discussed on p. 49, and Insurance reports (p. 45), winter session (p. 55), and letters (p. 62) should be read. Exportation of patent medicines is held up for the reasons given on p. 50. No relief for chemists of military age is yet in sight. See p. 36 and p. 50.

The "C. & D." Annual Subscription.

Owing to the changes in the newspaper postal rates, which came into force on Monday, November 1, the cost of delivering THE CHEMIST AND DRUGGIST has been much augmented, and it has become necessary to increase the annual subscription rate from 10s. to 12s. 6d. Changes of this nature are contemplated by the Post Office and Telegraph Act, 1915 (which creates the new rates), Section 2 (1) being as follows:

"Any contract for the supply or delivery to subscribers of newspapers, periodicals, or other publications at rates including postage, so far as the contract includes the supply or delivery of publications the rate of postage on which is increased after the passing of this Act, and before the first day of January, nineteen hundred and sixteen, may be determined by any party to the contract as from the date on which the rate is raised by notice given to the other party to the contract not later than fourteen days after the increase of rate takes effect."

Notwithstanding this provision, and that the postage on each issue will never be less than double the old rate, all that is proposed in the case of THE CHEMIST AND DRUGGIST is to charge the 12s. 6d. rate for all new subscriptions dating from December 1, 1915, and the same for new and renewal subscriptions dating from January 1, 1916, and thereafter. The increase of 2s. 6d. represents part only of the outlay incurred at this time, as it is not proposed to diminish the interest and utility of the C. & D., but to maintain it as a weekly publication of unimpaired value. Subscribers who receive from the Publisher notice that their subscriptions expire at the end of November are particularly requested to renew promptly, as our subscription department is exceptionally pressed with work at this season, and war conditions are increasing the work greatly.

European War.

A Year Ago To-day.

(War News in "C. & D." November 21, 1914.)

The first announcement was made regarding Government action in meeting the deficiency of aniline dyes. This movement afterwards fructified in the State-subsidised establishment of British Dyes, Ltd. The Belgian Doctors' and Pharmacists' Relief Fund, referred to in the previous week, was in working order and considering the best method of relieving victims of German barbarities in Belgium. We indicated that France was taking sharp measures to deal with the property of Germans in France, a system of sequestration having been established. The Chancellor of the Exchequer brought in new Budget proposals, but confessed his inability to tax effectually the "elusive teetotalers," as it had been suggested he should. We advised buyers to cover well their requirements of quinine, which then stood at about 1s. 1d. per oz.

Pharmaceutical Roll of Honour.

Non sibi sed patriæ.—CICERO.

SIXTY-FIRST LIST.

BLAND, Corporal JOSEPH (lately with Mr. H. Troughton, chemist, Lancaster), 8th Battalion Seaforth Highlanders. Corporal Bland is reported missing.

DAVIES, T. (lately apprentice with Mr. E. F. W. Thorp, chemist, Moss Side, Manchester), Manchester University O.T.C.

DEWHURST, Sapper EDGAR (late assistant with Evans & Sons, pharmacists, Lymington), Royal Engineers.

GOLDON, Second-Lieutenant T. M. (eldest son of Mr. H. V. Goldon, Ph.C., Birr, Ireland), A.S.C.

JAMIESON, Sergeant JAMES DIXON, chemist and druggist (former assistant with Messrs. Whitelaw, Cupar-Fife, and Lindsay, Peebles), R.A.M.C.

LEWIS, NOAH (former apprentice of Mr. E. H. Pym, chemist, Llandaff), Royal Garrison Artillery.

MAIN, JOACHIM (lately with the Malvern Wells Drug-stores, High Street, Malvern Wells), R.A.M.C.

MAYSON, WILFRID LESLIE, chemist and druggist, 22 Raikes Road, Blackpool, R.A.M.C.

MURRAY, Lieutenant CLARENCE A. (of the representative staff of the National Drug and Chemical Co., Canada), 7th Canadian Infantry.

SWANSON, Private GEORGE BURNES (lately apprentice with Mr. R. Robertson, chemist, Dunfermline and Musselburgh), 3rd Battalion Cameron Highlanders. Private Swanson was refused by the recruiting authorities some months ago on account of hernia. He underwent an operation and returned to Mr. Robertson for three months, and has now been accepted.

WALLACE, Private ALEXANDER (lately with Alexander's Drug and Dental Co., Chesterfield), Nottingham and Derby Regiment.

WALTON, Rifleman H. C. (with R. W. Greeff & Co., Thames House, Queen Street, E.C.), 3/16th London Regiment, Queen's Westminster Rifles.

WATCHORN, Sergeant R. M. (lately assistant with Mr. F. Dickinson, chemist, Stamford, Lines), R.A.M.C., 3rd Welsh Army Corps. Sergeant Watchorn has been recommended for a decoration for conspicuous bravery on the field. Under heavy fire he rode from the trenches to the dressing-station for dressings for the wounded, and succeeded in completing his task without injury.

AYRTON, SAUNDERS & Co., LTD., Liverpool, inform us that the following members of their staff have enlisted within the last few days: Richard A. Carter, G. Williams, J. Loughran, B. Mundy, A. Whalley, W. Morley, T. Walsh, W. J. Mundy, A. Kinder, and H. King.

Occupations from which Enlistments should be Restricted.

An Inter-departmental Advisory Committee is engaged in preparing lists of reserved occupations—i.e., occupations from which enlistments should be restricted—in view of the necessity of maintaining the trade of the country as far as possible. Representations from employers with reference to indispensable and irreplaceable classes of labour should be addressed to the Secretary, Reserved Occupations Committee, Board of Trade, Gwydyr House, Whitehall, S.W.

The report of the Shops Committee appointed to consider the conditions of retail trade which can best secure that the further enlistment of men in their employment or other national services may not interfere with the operations of that trade, has been published this week. Chemists and druggists appear not to have been considered or represented. No recommendations are made, but the Committee

asks to be continued in being, so that there is still an opportunity for the Pharmaceutical Society to bring to the notice of the Committee the fact that the practice of pharmacy is jeopardised, should Mr. Glyn-Jones have failed to convince the special Conference on Recruiting which has been held to-day (November 18).

Export Notice.

SWITZERLAND.—The Foreign Office announces that a society known as the "Société suisse de Surveillance économique" has been formed at Berne, and will undertake to supervise the importation of goods into Switzerland, and to guarantee the fulfilment of the conditions attaching to such importation. The society will take delivery of, and be the only authorised consignee in Switzerland for, all commodities on the lists of contraband and restricted exports in the Allied countries, which can only be consigned to this society with its written consent.

War Trade Department.

A deputation from various Chambers of Commerce throughout the United Kingdom was received by Lord Emmott, the Chairman of the War Trade Department, at his offices on November 11, in regard to the administration of that Department. It was urged that the Government should afford all reasonable facilities and every possible encouragement for the maintenance and increase of the export trade of the country. The deputation expressed the view that the policy of the Department is unduly hindering export trade, and pointed out that the delays in the issue of licences and the difference in the treatment of applications are the most frequent causes of complaint. Lord Emmott replied that his Department is often blamed when it is not responsible. He promised that all cases brought to his notice would be carefully looked into, and he will do all in his power to meet the views of the deputation.

Liquor Control

The "London Gazette" of November 12 contained orders by the Central Control Boards (Liquor Traffic) of the Midlands, Western Border, Portsmouth, Pembroke, Plymouth, Falmouth, and West Riding areas. They are more or less the same, and we mention them chiefly on account of the fact that "licensed premises" in the orders includes "any premises or place where the sale of intoxicating liquor is carried on under a licence." Therefore they apply to chemists' shops which are licensed for the retail sale of wine. The sale of liquor for consumption "off" the premises is restricted on weekdays to the hours between 12 noon and 2.30 p.m. and between 6.30 p.m. and 8.30 p.m., and on Sundays the hours between 12.30 p.m. and 2.30 p.m. and between 6 p.m. and 8 p.m. One of the saving provisions is that nothing in the provisions "shall be deemed to prohibit, in cases where the same is otherwise lawful, the sale or supply of spirits to any person producing a certificate in writing signed by a duly qualified medical practitioner that the spirits are immediately required for medicinal purposes." We may note that "spirits" does not include wines, but "intoxicating liquor" does. It is understood that similar orders in respect to London are under consideration.

Personalia.

MR. F. W. MOORE, chemist and druggist, dispenser to St. Pancras Guardians, has applied to be allowed to enlist on the terms decided upon by the Board.

CAPTAIN VICTOR ROBINSON, of Robinson & Sons, Ltd., box and surgical-dressings manufacturers, Chesterfield, has been awarded the Military Cross for conspicuous conduct in the field. Captain Robinson is serving with the 1/6th Notts and Derbyshire Regiment (T.F.), and he has received a congratulatory message from the commander of the brigade.

PRIVATE HAROLD HUDSON, who served his apprenticeship with Mr. W. Ruff, chemist and druggist, of Skinner Street, Whitby, and who was later in business with his brother, Mr. Charles Hudson, chemist and druggist, Zealandia, Sask., is in hospital at Shorncliffe suffering from a fractured leg. He is attached to the medical staff of the 5th Canadian Field Artillery.

Miscellaneous.

TRADE WITH CHINA AND SIAM.—The second supplement to the "London Gazette" (November 5) contains complete revised lists of persons and bodies of persons to whom articles to be exported to China and Siam may be consigned, under the terms of the Proclamation of September 24.

GIFTS TO SOLDIERS.—Neve & Co., chemists, 12 Wellington Place, Hastings (Mr. Harold E. Skryme, chemist and druggist, proprietor), are again advertising their free gift of a tin of Shurzine antiseptic ointment to soldiers and sailors. This offer has been running since the outbreak of war, and 50,000 tins of the ointment have already been distributed to members of the Forces.

FATS FOR GERMANY.—Sir Henry Dalziel, M.P., recently asked a question in the House of Commons in regard to the enormous exports of linseed oil to Holland which are thirty times greater now than they were before the war. Sir Henry's inference is that they simply go on to Germany. The last issue of "Reynolds's Newspaper," of which Sir Henry is editor, contains an article throwing suspicion upon the Netherlands Overseas Trust, and pointing out that the German Minister of Agriculture has prepared for the stoppage by the desperate efforts that are being made to get oils and fats of any kind from German-grown seeds and the like.

WOMEN DISPENSERS.—We observe that the Secretary of the Joint V.A.D. Committee, Room 67, 83 Pall Mall, London, S.W., wants women clerks and shorthand typists, women cooks, and women dispensers. The last-named must hold the certificate of the Pharmaceutical Society or of the Dublin or London Apothecaries' Hall, and the terms are 30s. per week. As previously reported in the *C. & D.*, they are taken on one month's probation and, if then suitable, are signed on for six months and receive 4l. for uniform allowance. [The Medical Department of the War Office is now inquiring into the question as to whether or not women who are not qualified under the Pharmacy Acts are efficient substitutes for men who are. Apothecaries' assistants are getting a hearing.]

THE RECRUITING MOVEMENT.—A representative meeting of tradesmen at Wigan last week, to which members of the local wholesale and retail drug-trade were invited, considered the question of assisting the recruiting movement, and adopted a resolution pledging those present to do everything possible to ensure the success of Lord Derby's scheme by releasing eligible employes for enlistment.—The following have been appointed members of local Recruiting Tribunals under Lord Derby's scheme: Alderman C. J. Wain, Ph.C., Newcastle-under-Lyme; Alderman Owen A. Clark, Mayor of Bury St. Edmunds.

Corner for Students.

Conducted by Leonard Dobbin, Ph.D.

Communications should be addressed Corner for Students, "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Report on November Analytical Exercise.

THE powder distributed to students on October 26 contained 5 parts, by weight, of potassium sulphate, 4 parts of potassium oxalate, and 1 part of potassium nitrate. The calculated composition of such a mixture is:

| | | | | |
|-------------------------------|-----|-----|-----|------|
| K | ... | ... | ... | 43.3 |
| SO ₄ | ... | ... | ... | 27.6 |
| C ₂ O ₄ | ... | ... | ... | 19.1 |
| NO ₃ | ... | ... | ... | 6.1 |
| H ₂ O | ... | ... | ... | 3.9 |

100.0

Samples of the powder were distributed to forty-four students, and twenty-five reports were sent in for examination. Potassium was detected by all who submitted reports. The failures in the detection of the acid radicals were: Sulphuric, 2; oxalic, 4; nitric, 14. Thirteen students failed to report the evolution of water, which was given off in somewhat small proportion when the powder was heated in a dry tube.

Some discrepancies of statement by different students with regard to the same points, the recurrence of various perennial mistakes, and numerous instances of insufficiently close observation are the chief features connected with this exercise. We shall illustrate these matters in the order mentioned.

The reaction of the aqueous solution of the powder was variously reported as neutral, acid, and alkaline: in our hands test-papers showed a barely recognisable alkaline reaction in a short time after the solution had been applied to them. Some students reported the phosphoric-acid radical, and, in the iron group, a precipitate which was worked up by a special phosphate-separation method; while others reported the phosphoric-acid radical absent and obtained no iron-group precipitate: our experience accorded with the latter.

The precipitate of silver oxalate produced by silver nitrate in the testing for acid radicals was very commonly mistaken for silver chloride because it only dissolved with difficulty in dilute nitric acid, and this mistake was made by numerous students who knew that an oxalate was present and who should, therefore, have been on special guard against a cause of error which, if not well known, has at

least been pointed out repeatedly. When testing for an oxalate in an acetic-acid solution by means of a calcium salt due attention was paid in only a very few cases to the fact that a sulphate was present in large proportion, and that therefore, since precipitation of calcium sulphate was liable to occur, it was necessary to prove that any precipitate obtained really consisted of calcium oxalate, unless the precipitant used in its formation was a solution of calcium sulphate. The boiling of the powder, by several students, with water and sodium carbonate or bicarbonate with a view to preparing a solution to be tested for acid radicals showed complete absence of any conception of the function which this treatment is intended to fulfil in those cases in which it is of service.

The evolution of water when the powder was heated in a dry test-tube was unreported by more than half our correspondents. The quantity evolved was relatively small, but its condensation was distinctly observable when care was taken to prevent its easy escape out of the tube by lightly closing the mouth of the latter with the thumb while heating. The failures to detect the nitric-acid radical were even more numerous. The usual test for nitrates with ferrous sulphate and concentrated sulphuric acid gave after a short time a quite distinct indication which should not have been overlooked. When a nitrate is present in small quantity only, a distinct reaction is often not observable at once, but it usually becomes so gradually on standing for a few minutes. In the present instance a well-marked indication of a nitrate was obtained by means of *Tingle's test*, described in the "Journal of the Society of Chemical Industry," April 30, 1915, p. 395. The reagent employed is prepared by dissolving 2 grams of salicylic acid in 30 c.c. of concentrated sulphuric acid. A very small quantity of the powder to be examined is heated in a test-tube with a few drops of this reagent. A drop of the resulting liquid is transferred to a white porcelain slab by means of a glass rod, and two or more drops of a concentrated solution of potassium hydroxide are added—enough to produce an alkaline mixture. The production of an orange or yellow colour indicates the presence of a nitrate. This is a delicate test, and it may be commended to the notice of our correspondents.

PRIZES.

The First Prize for the best analysis has been awarded to ANNIE R. BENZIE, c/o Watt, 32 Whitehall Place, Aberdeen.

The Second Prize has been awarded to CYRIL T. HINES, Norfolk House, Dauvers Road, Hornsey, N.

First Prize.—Any scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

Second Prize.—Any scientific book which is sold for about five shillings may be taken as a second prize.

The students to whom prizes are awarded are requested to write at once to the Publisher naming the book or books they select.

MARKS AWARDED FOR ANALYSIS.

1. Correspondents who are unqualified:

| | | | | | |
|------------------------------------|----|----------|-----|-----|----|
| Annie R. Benzie (1st Prize) | 99 | Nomen | ... | ... | 81 |
| Cyril T. Hines (2nd Prize) | 98 | Scott | ... | ... | 79 |
| Elswick | 97 | Tony | ... | ... | 77 |
| Dominus | 97 | Victory | ... | ... | 76 |
| Lin. Alb. | 94 | Senex | ... | ... | 75 |
| Parvus | 93 | Junior | ... | ... | 71 |
| Belladonna | 91 | Mox | ... | ... | 71 |
| Un yn trio | 91 | Fuddler | ... | ... | 69 |
| Osmium | 83 | Onyx | ... | ... | 55 |
| | | H. I. W. | ... | ... | 49 |
| | | Spes | ... | ... | 31 |

2. Correspondents who are qualified:

| | | | | | |
|-----------------|----|--------|-----|-----|----|
| Aspirant | 80 | Cobalt | ... | ... | 78 |
| Cobalt | 76 | Nitrax | ... | ... | 81 |
| Colonebs | 82 | | | | |

TO CORRESPONDENTS.

ELSWICK, LIN. ALB., and others.—In the known presence of the sulphuric-acid radical it would have been advisable to add calcium sulphate rather than calcium chloride when testing for an oxalate. In any case, the precipitate should have been heated with dilute sulphuric acid and solution of potassium permanganate to see whether the latter was reduced by it or not.

DOMINUS.—The best way of applying the ferrous sulphate and sulphuric acid test for a nitrate was to mix the aqueous solution of the powder with freshly prepared solution of ferrous sulphate, and then to run in the sulphuric acid, cautiously, so as to form a separate layer. See also the test for a nitrate mentioned in the general remarks.

PARVUS.—You refer to the aqueous solution of the powder as possessing an acid reaction. We found it to be almost neutral, but with a faint indication of alkalinity.

BELLADONNA.—With a view to preparing a solution to be tested for acid radicals you seem to have boiled a portion of the powder with sodium bicarbonate without pausing to reflect what is the object of such treatment in cases where it is useful. In the present instance it was entirely useless.

SCOTT.—The cloudiness which you observed on dissolving the powder in water was most likely due to traces of calcium salts in tap-water. Distilled water gave a perfectly clear solution.

VICTORY.—It is a mistake to suppose that a salt contains water of crystallisation because it is crystalline. Of the three crystalline salts present in the mixture, only one—the oxalate—contained water of crystallisation.

SENEX.—The powder did not contain any magnesium. The precipitate you obtained on adding barium hydroxide with a view to separating magnesium was not magnesium hydroxide, but simply barium sulphate.

JUNIOR.—We failed to obtain any indications of the presence of a phosphate or any precipitate in the iron-group. Read also the reply to "Parvus."

MOX.—In testing for acid radicals you found the precipitate produced by barium chloride to dissolve completely in dilute nitric acid. As it must have consisted partly of barium sulphate we are unable to explain this experience.

FUDDLER.—You report that on treating the powder with sulphuric acid, cold and hot, in the preliminary testing there were no characteristic reactions noticeable in the small quantity at disposal. Closer observers who received a similar small quantity obtained at this stage almost certain evidence of the presence of an oxalate and a nitrate. Aim at cultivating habits of attentive observation.

ONYX.—It was probably a mere slip which led you to describe a precipitate formed by silver nitrate as nearly all dissolved by hydrochloric acid. Read also the reply to "Junior."

SPES.—The contents of your neatly drawn up report did not bear out the promise of its "fair outward seeming." We are at a loss to understand how the powder became contaminated in your hands with some substance which gave the reactions of stannous compounds, unless you used insufficiently cleansed test-tubes. Prepare a mixture in imitation of this exercise and practise upon it until you understand how its constituents can be detected with certainty.

COBALT and FRANCISCO.—We tried carefully, but unsuccessfully, to confirm the presence of a trace of an ammonium compound.

** The second exercise of the Tournament series will be distributed to students on December 7. Applications may now be sent for samples, as to which an announcement will appear next week.

Coming Events.

This section of the "C. & D." is reserved for advance notices of meetings or other events. These should be sent to the Editor by Wednesday of the week before the meetings, etc., occur.

Sunday, November 21.

Pharmacists' Volunteer Training Corps. Westminster Training College drill-ground at 9.30 A.M. March to Herne Hill Station for practical sanitation. Lunch must be taken in haversacks and greatcoats or mackintoshes rolled over the left shoulder.

Tuesday, November 23.

Oldham Pharmaceutical Association. Café Monaco, Union Street, at 3 P.M. Mr. S. N. Pickard on "The Proprietary Articles Trade Association."
Cardiff Pharmacists' Association. Angel Hotel, at 8.45 P.M. Election of officers.

Wednesday, November 24.

Pharmaceutical Society of Great Britain, North British Branch. 36 York Place, Edinburgh, at 8.30 P.M. Evening meeting. Inaugural sessional address on "Insect and Arachnid Enemies in Camp, Trench, and Field," by Dr. R. Stewart MacDougall, M.A., F.R.S.E.

Meeting of West Riding Chemists. Grand Central Hotel, Leeds, at 3 P.M., to discuss their position under the new Insurance-Tariff. The attendance of all is urgently desired. Those who cannot attend should write to Mr. R. Broadhead, Batley, telling him what they think of it.

Thursday, November 25.

North London Pharmacists' Association. St. Padarn's Hall, Salterton Road, Holloway, N., at 8 P.M. Fireside social.
South-East London Pharmacists' Association. Maitland House, 134 Greenwich Road, Greenwich, at 3 P.M. Ordinary meeting.
Swansea and West Glamorgan Chemists' Association. Hotel Cameron, Swansea, at 3 P.M. Discussion on new Drug Tariff.

English and Welsh News.

Subscribers are invited to send to the Editor newspapers containing matters of trade interest. The items should be indicated.

Retail Prices.

The following minimum retail prices, among others, have been passed by the Council of the Proprietary Articles Trade Association since the publication of the last Protected List (*C. & D.*, October 30, p. 36):

Allcock's Plasters, 10*d.*; Allen & Hanburys' Café Vierge, 1*s.* 5*d.* and 2*s.* 9*d.*; Anthony's Le Rois Albania Salve, 1*s.* 3*d.* and 3*s.*; Baker's Backache Pellets, 1*s.* 3*d.* and 2*s.* 10½*d.*; Barclay's stamped goods on P.A.T.A., 1*s.* 2*d.*, 2*s.* 10½*d.*, and 5*s.*; Beach & Barnicot's Dr. Robert's Poor Man's Friend, 1*s.* 1½*d.*, 2*s.* 6*d.*, 4*s.*, and 10*s.*; Beetham's Corn and Bunion Plasters, 1*s.* 3*d.* and 5*s.*; Bishop's Caffeine, 1*s.* 1½*d.*, 1*s.* 6*d.*, 2*s.* 9*d.*; Lithia Citrate without Sugar, 2*s.*; Magnesia Citrate, 11*d.*, 2*s.*; Potash Citrate, 2*s.*; Bleasdale's Fikheel, 1*s.* 3*d.* and 2*s.* 9*d.*; Burgess's Lion Ointment and Pills, 5½*d.*, 1*s.* 2*d.*, 2*s.* 10*d.*, and 4*s.* 6*d.*; Blair's Gout-pills, 1*s.* 2*d.*, 2*s.* 10½*d.*; Carna Bath Salts, 1*s.* and 1*s.* 6*d.*; Collis Browne's Chlorodyne, 1*s.* 2*d.*, 2*s.* 10½*d.*, 4*s.* 9*d.*, and 11*s.* 6*d.*; Denoual's Ammoniated-quinine Capsules, 1*s.*; Quinine and Cinnamon Perles, 1*s.*; Santal-oil Capsules and Santal Perles, 2*s.* 6*d.*; De Witt's Kidney and Bladder Pills, 2*s.* 9*d.*, 5*s.*; Duni's Ammoniated-quinine Capsules, 30 and 60 minims, 10*d.* and 11*d.*; Ecsolent Compounds, 1*s.* 3*d.*, 2*s.* 9*d.*, 4*s.* 6*d.*; Esmolin, 1*s.* 3*d.*, 3*s.*; Evans's Ca-cara Hawley, 1*s.* 3*d.*, 4*s.* 6*d.*; Antiseptic Throat Pastilles, 1*s.* 3*d.*, 5*s.*; Evans Gadd's Thymol Antiseptic, 1*s.* 3*d.*; Gibbs' Taleum Powder, 10½*d.*; Gladstone's Nulha Cocoa, 1*s.*, 2*s.*; China Tea, 1*s.* 6*d.*, 5*s.*; Gordon Murray's Berley's Preparations, 11*d.*, 1*s.* 1½*d.*, 2*s.* 9*d.*, and 4*s.* 6*d.*; Hardy's Brompton Specific, 1*s.* 2*d.*, 2*s.* 10½*d.*, 4*s.* 9*d.*; Hinksman's Asthma Reliever, 1*s.*; Homocca, 1*s.* 3*d.*, 3*s.*; Honore Payan's Red, White, and Blue Cologne, 7½*d.*, 1*s.* 2*d.*, 2*s.* 2*d.*, 3*s.* 6*d.*, 4*s.* 2*d.*, and 6*s.* 6*d.*; Hood's Medicine, 1*s.* 3*d.*, 3*s.*, 5*s.*; Hooper's Pills, 1*s.* 2*d.*; Iron Jelloids, 1*s.* 3*d.*, 2*s.* 3*d.*, 3*s.* (extra strong, 1*s.* 3*d.*, 2*s.* 6*d.*, 4*s.*); Jeyes' Fluid, ½ pt., pt., and qt., 10½*d.*, 1*s.* 3½*d.*, 2*s.*; Jif Powders, 3*s.* box, 3½*d.* each; Johnson's Digestive Tabs., 1*s.* 3*d.*, 2*s.* 6*d.*; Kay's Linseed Compound, 9½*d.*, 1*s.* 1½*d.*, 2*s.* 9*d.*, 4*s.* 6*d.*, and 11*s.*; Keating's Lozenges and Hayman's Balsam, 1*s.* 2*d.*, 2*s.* 10½*d.*; Langdale's Conc. Ess. of Cinnamon and other preps., 1*s.* 1*d.*, 2*s.* 9*d.*, 4*s.* 11*d.*, and 11*s.* 4*d.*; Leslie Martyn's Female Pills (Blanchard), 1*s.* 3*d.*, 3*s.*, 5*s.*; Lipozone, 1*s.* 2½*d.*, 2*s.* 5*d.*, 4*s.* 10*d.*; Macqueen's Vegetine Pills, 1*s.* 3*d.*, 3*s.*, 5*s.*; McClinton's Hibernia Shaving-sticks 10½*d.* (1*s.* sticks remain as in "Y.R."); Mothers' Ill's Seaside Remedy, 2*s.* 6*d.*, 5*s.*; Newton, Chambers' Izal Cream, Lozenges, and Ointment, 1*s.* 3*d.*; Nichols' Food of Health, 10*d.*; Sanitary Soap, 11*d.*, 1*s.* 4*d.*; No-Germ, 2*s.* 6*d.*; Okayoids, 1*s.* 3*d.*; Omega and Cadum, 1*s.* 2*d.*; Pearson's Lactagol, 1*s.* 6*d.*, 2*s.* 9*d.*; Peat Products Co.'s Sphagnum Ointment, 1*s.* 2*d.*, Suppositories 2*s.* 2*d.*; Perkin's Liver-pills, 8½*d.*, 1*s.* 2*d.*, 2*s.* 9*d.*, and 4*s.* 9*d.*; Pond's Preparations (various), 1*s.* 2*d.*, 2*s.* 6*d.*; Powell's Balsam 1*s.* 3*d.*, 2*s.* 6*d.*, 5*s.*, 12*s.*; Regulon, 1*s.* 1½*d.*, 2*s.* 9*d.*, 5*s.*; Rendell's Pessaries, 2*s.*; Roche's Embrocation, 4*s.* 1*d.*; Sanitas Embrocation and Pastilles 1*s.* 3*d.*, Fluid and Powder and other preps., 6*d.* and 1*s.*; Smith's Healo Ointment, 1*s.* 3*d.*, 3*s.*; Southall's Capsogen, 1*s.* 1½*d.*, Conqueror Corn-cure, 9*d.*; Sutton's Dr. Bateman's Drops, 1*s.* 3*d.* 3*s.*; Daff's Elixir, 2*s.* 3*d.*, 3*s.*; Thomson & Camper's Oniphos 1*s.* 3*d.*, 2*s.* 11*d.*, 5*s.*; Timbridge & Wright's Cole's Ointment and Pills, 9*d.*, 1*s.* 3*d.*, 3*s.*; Veno's Couch-cure 11½*d.*, 1*s.* 3*d.*, 2*s.* 11*d.*; Cassell's Tablets, 1*s.*, 1*s.* 3*d.*, 2*s.* 11*d.*; Seaweed Tonic 1*s.* 3*d.*, 2*s.* 11*d.*; Warner's Safe Cure, 2*s.* 9*d.*, 4*s.* 5½*d.*, 10*s.* 6*d.*; Wright's Liq. Carb. Deter., 1*s.* 2½*d.*, 2*s.* 9*d.*, 4*s.* 9*d.*, etc.; Pills, 1*s.* 2½*d.*; Yardley's Shaving-stick in glass case, 1*s.*

The West Bromwich Pharmaceutical Association fixed the following revised prices on November 16:

Quinine sulphate: 15 gr., 3*d.*; 5*j.*, 9*d.*; tablets, 25 2-gr., 10*d.*; 100, 2*s.* 6*d.*; pills, 2-gr., 5*d.* doz. Acid Tart.: Pulv., 2½*d.* oz., 9*d.* ½ lb., 2*s.* 11*d.*, lb.; cryst., 3*d.* oz., 10*d.* ½ lb., 3*s.* 2*d.* lb. Potass. bicarb.: 2*d.* oz., 7*d.* ½ lb. Bromides (soda, potass., ammonia), 1*s.* 6*d.* oz. Potass. chlorate: Pulv., vel. cryst., 2½*d.* oz., 8*d.* ½ lb. Troch. bismuth: 3½*d.* oz., 1*s.* ½ lb. Bismuth. carb.: 1*s.* 6*d.* oz. Pears' soap, 4*d.* and 8*d.*; violet powder, 4*d.*, 8*d.* Calvert's tooth-powder, 5*d.*, 10*d.*, 1*s.* 3*d.*, 4*s.* 6*d.*; paste, 4½*d.*, 9*d.* Fenning's preps., 1*s.* 1½*d.* and 2*s.* 6*d.*; powders, 1*d.* each, four for 3½*d.* Sulpholine lotion, 1*s.* 1½*d.* and 2*s.* 7*d.*; soap, 5*d.* Steedman's powders, 1*s.* 0½*d.* and 2*s.* 7*d.*; 1*d.* each loose. Eade's pills, 1*s.* 2*d.* and 2*s.* 11*d.*; Scott's pills, 1*s.* 2*d.* and 2*s.* 10*d.*; McKenzie's salts, 1*s.* 3*d.*; L.B.Q.

tabs., 1*s.* 3*d.*; Veno & Cassell's preps., 11½*d.*, 1*s.* 3*d.*, and 2*s.* 11*d.*; Winslow's syrup, 1*s.*; Iron ox tabs., 1*s.* 3*d.* and 5*s.*; Seigel's syrup, 1*s.* 2*d.* and 2*s.* 3*d.*

Municipal Honours.

We note the following municipal appointments in addition to those mentioned last week:

Chesterfield.—Major W. B. Robinson, of Robinson & Sons, Ltd., box-manufacturers, Chesterfield, has been appointed Deputy-Mayor of the borough.

Flint.—Major C. E. Dyson, V.D., J.P., manager at Flint for the United Alkali Co., Ltd., has been elected Mayor of Flint for the fifth successive year.

Birmingham.

An endeavour is being made to close all shops voluntarily at 7 p.m., but one large shop remains open until 7.30, and has not at present been got in line.

The question What is magnesia? is agitating the minds of pharmacists in this district, also the best method of retailing it so that it will remain "magnesia."

The City Council has unanimously elected Mr. Arthur Wright, analytical chemist, to a seat on the Council, where he will have Mr. Jeffrey Poole, Ph.C., and Alderman Clayton, Ph.C., as colleagues. Sir Thomas Barclay was at one time on the Council.

The lady pharmacist has invaded the wholesale branch, and negotiations are proceeding for an extended employment of qualified females in the wet, dry, and poisons departments. Although it is stated not to be necessary for them to be qualified for the work, it is thought desirable that qualification should be insisted upon.

Liverpool.

Mr. Anthony Buck, pharmacist, Bedford Street South, has resumed his work after a period of sharp illness and recuperation at Llandudno.

The Mayor of Southport (Mr. Henry Ball) figured below his portrait last week in the *C. & D.* as a "land-grounder" instead of a "sandgrounder," which is the local title of a native of Southport. (Peccavimus!)

The P.A.T.A. delegates (Dr. H. A. Barnes, of Dublin, and Mr. E. McMillen) were entertained at dinner by Mr. G. H. Burroughs (John Thompson, Ltd.) on their visit to Liverpool, together with Mr. John H. Robinson, Hon. Secretary of the L.C.A.

A large attendance was secured at a recent meeting under the auspices of the Liverpool Chemists' Association by the use of a red label, after the "poison" pattern, affixed to the cover of the circulars, the word "urgent" striking the eye and commanding attention. The circulars acquired life, so to speak. Other Associations may take note when attendances are on the decline.

Copies of the Pharmaceutical Society's circular on "The Enlistment of Pharmacists" have been sent round to local members this week. The enlistment already of retail assistants and the liability of a percentage of pharmacists to serve threaten to leave the ranks seriously depleted. As already stated in the *C. & D.*, the wholesale trade early supplied many recruits. From the School of Pharmacy, Colquitt Street, forty-two students have been enrolled in the Army. The influx of female students, chiefly intending dispensers, is unprecedented.

Sheffield and District.

At the Chesterfield Town Council meeting Major Robinson carried a resolution asking that two guns captured from the Germans be presented to the town.

Wright's Coal-tar Soap, with the noted "The Toast is Britain" picture, is making a very effective whole-window display in several pharmacies just now. The picture certainly draws the passers-by.

Quite a little flutter has been made by the Pharmaceutical Society's poison-catcher among the unqualified drug-stores and grocers by the purchase of Izal, with the resulting demand of the usual penalty for infringement.

Mr. Uglow Woolcock, Secretary to the Pharmaceutical Society, is very busy just now keeping in touch with provincial associations. On Tuesday night he met a deputation of Sheffield officials at the station on his way from Leicester to Leeds and had a talk over pharmaceutical affairs.

The chemists in the Abbeydale and Ecclesall districts have decided to follow their *confreres* in the early-closing movement. The hour of closing on ordinary nights will be 8 P.M. for the suburbs. Anyone contemplating earlier closing-hours will do well to notify the Insurance Committee at once, so that the necessary alterations may be made on the list of hours shortly to be published.

Contracts.

The following notifications have been received since our last issue:

Bethnal Green Borough Council.—Baiss Bros. & Stevenson, Ltd., for drugs and druggists' sundries.

London.—Baird & Tatlock, Ltd., to supply the Metropolitan Asylums Board with filtering-flasks to the bacteriological laboratories to the value of 100l.

Tottenham.—Newton, Chambers & Co., Ltd., and Burt, Boulton & Haywood, Ltd., have agreed to extend for six months their contracts with the Urban District Council for the supply of disinfectants. Adcocks, Ltd., who supply chloride of lime, and the Sanitas Co., Ltd., so far as regards sanitas okol, are unable to agree to an extension owing to war conditions.

WAR OFFICE.—*Alum, Iron:* Water Softeners, Ltd. *Chloride of Lime:* Electro Bleach and By-Products, Ltd.; United Alkali Co., Ltd. *Combs, Hair:* Aberdeen Comb-works Co., Ltd.; J. A. Stevens & Son (Sheffield), Ltd. *Medicines:* Allen & Hanburys, Ltd.; Boots Pure Drug Co., Ltd.; The British Drug Houses, Ltd.; Burgoyne, Burbidges & Co.; Burroughs Wellcome & Co.; E. H. Butler & Son; A. H. Cox & Co., Ltd.; Davies, Sons & Co.; Howards & Sons, Ltd.; Johnson & Sons (Manufacturing Chemists), Ltd.; H. & T. Kirby & Co., Ltd.; Matthews & Wilson, Ltd.; May & Baker, Ltd.; Parke, Davis & Co.; J. Richardson & Co. (Leicester), Ltd.; Southall Bros. & Barclay, Ltd.; Standard Tablet and Pill Co., Ltd.; Willows, Francis, Butler & Thompson, Ltd. *Methylated Spirit:* B. Biggs & Co., Ltd.; May & Baker, Ltd. *Polish, Wax:* Chiswick Polish Co., Ltd. *Surgical Instruments and Materials:* Allen & Hanburys, Ltd.; Arnold & Sons; W. H. Bailey & Son; Baird & Tatlock (London), Ltd.; Baiss Bros. & Stevenson, Ltd.; W. Barbour & Sons, Ltd.; F. Braby & Co.; British Oxygen Co., Ltd.; Coxeter & Son; Cuxson, Gerrard & Co., Ltd.; De Grave, Short & Co., Ltd.; Down Bros., Ltd.; A. Gallenkamp & Co., Ltd.; P. Harris & Co. (1913), Ltd.; J. L. Hatrick & Co., Ltd.; G. Haynes & Co.; S. Maw, Son & Sons; Mayer & Meltzer; Medical Supply Association; Southall Bros. & Barclay, Ltd.; J. Weiss & Son, Ltd. *Thermometers:* Allen & Hanburys, Ltd.; Burgoyne, Burbidges & Co.; Perken, Son & Co., Ltd.; G. H. Zeal.

Miscellaneous

AUCTION SALE.—The stock, fixtures, etc., of Mr. Wilfrid L. Mayson, chemist and druggist, 22 Raikes Road, Blackpool, have been disposed of by auction, Mr. Mayson having joined the Colours (p. 35).

COPPER IN PEAS.—In the prosecution of a Frenchman at Westminster on November 17 for selling peas containing 2.8 gr. of copper sulphate per lb. it was successfully contended that copper sulphate is one of the constituents of tinned green peas.

HERBERT A. SMITH, manufacturing chemist, Leicester, applied for discharge from bankruptcy at Leicester on November 17, but the application was held over for three months to give him an opportunity of coming to an arrangement to pay the creditors part of his salary.

NOBEL PRIZES.—The Royal Academy of Science, Stockholm, has awarded the Nobel Prize for Chemistry for 1914 to Professor A. R. Willstätter, Berlin, and the prize for Physics to Professor W. H. Bragg, Leeds, and Mr. W. I. Bragg, Cambridge, for their work on the examination by x-rays of the formation of crystals.

DAMAGES CLAIMED.—Owing to the war having led to the abandonment of a street-improvement scheme at Bramwell's Corner, Penzance, the Timothy White Co., Ltd. chemists, have claimed 353l. 7s. 4d. from the Town Council for the non-use of new premises for a year. The Council denies liability for the firm's loss owing to the scheme being held up.

FIRES.—Considerable damage was done to the premises of Mr. W. S. Tavener, chemist and druggist, High Street Guildford, through a fire which occurred at an adjoining drapery-store on November 5.—A fire occurred on November 17 at the engineering works of J. Baker & Sons, Ltd. Wilsden Junction, but the prompt arrival of the fire brigade checked the fire before it had time to develop seriously.

HENRY J. HERRING, an alleged chemist, was, at the Old Bailey on November 17, sentenced to four years' penal servitude for personating medical men. His antecedents were bad—e.g., he had committed bigamy at Hove with a woman he had attended, and since July 1906 he had obtained situations at Harlesden, Brighton, Hounslow, Bloomsbury, and Notting Hill by representing that he was a qualified chemist.

THE UNITED ALKALI CO.'S PROCESSMEN at Widnes refused to work on Saturday and Sunday, November 6 and 7, unless they were paid time and a half, although this had been refused by Sir George Askwith's Court of Arbitration. A settlement has now been obtained, the workmen returning at the old rate, which is 2s. better than it was before the war. The company has since the outbreak of war advanced the men's wages to the extent of 50,000l.

POISONING-CASES.—During the past week four poisoning cases have been reported, the poisons employed being veronal, prussic acid, morphine, and strychnine. The veronal-poisoning case was in London, but as only traces were found in the body, the dose taken is thought to have been very small. The strychnine-poisoning case was that of a Camberwell woman who took forty Easton's syrup tablets, the death being certified as "misadventure."

OPIMUM ILLEGALLY DECLARED.—At the Mansion House Police Court, London, on November 17, Jakob Alexandrovitch Stainer, Petherton Road, Canonbury, was fined 5l., and 25l. costs, for knowingly dealing in opium in contravention of the Customs (War Powers) Act regulations, and giving a false export certificate in relation to it. The facts of the case have been previously reported; he had attempted to send the drug by post in tins labelled "Malt-extract."

SCARCITY OF DRUGS.—The "Western Morning News" of November 15 contained a three-quarter column article on the high prices of drugs, due to Army demands. In the course of it the writer says that chemists and medical men were warned by the authorities before the war began that a shortage in drugs was likely. Some other statements are made of a similar nature—for example, the writer says that the Government are taking over available stocks, which is quite erroneous.

ROYAL SOCIETY.—The following nominations have been made for election into the Council at the anniversary meeting on November 30: *President*, Sir Joseph J. Thomson, O.M., M.A., D.Sc., LL.D.; *Treasurer*, Sir Alfred Bray Kempe, M.A., D.C.L.; *Secretaries*, Professor Arthur Schuster, Sc.D., Ph.D., and Mr. William Bate Hardy, M.A.; *Foreign Secretary*, Mr. Dukinfield Henry Scott, M.A., Ph.D., LL.D. *Other Members of the Council*, Professor John George Adams, M.D., Sir Thomas Clifford Albutt, K.C.B., Frederick Frost Blackman, D.Sc., Dugald Clerk, D.Sc., Sir William Crookes, O.M., D.Sc., Professor Arthur Dendy, D.Sc., John Stanley Gardiner, M.A., Henry Head, M.D., George William Lamplugh, Professor Augustus Edward Hough Love, D.Sc., Major Percy Alexander MacMahon, D.Sc., Professor Raphael Meldola, D.Sc., Professor Arthur Smithells, B.Sc., Professor Ernest Henry Starling, M.D., Richard Threlfall, M.A., Sir Philip Watts, K.C.B.

THE ROTARIANS seem to be a merry lot. That is the name given to members of Rotary Clubs throughout the world, the objects of which are:

First: The promotion of the business interests of its members. Second: The education of its members in new, progressive, and successful business methods. Third: To advance the individual business interests of its members through the media of sustained acquaintanceship, publicity, and personal recommendation, and by each member endeavouring to give individual attention and consideration to business received from fellow-members and their friends. Fourth: To promote good fellowship by cementing (through regularity of meeting) the ties of friendship among business acquaintances. Fifth: To broaden the experience of members by contact with men of widely different occupations, and to study and appreciate the special service and best interests of each of them.

There is a British Association of them, too, and the officers were entertained recently by the Manchester Club their longings being related in "Manchester Rotary Life." Two pharmacists took a prominent part in the proceedings—Mr. T. Stephenson, F.R.S.E., as a guest, and Mr. John Hitchcock as a host. Portraits of both appear in "Life," with a speech by the former and an appreciation of the latter.

FATS FROM DISH-WATER.—The German War Committee for Oils and Fats has concluded a contract with the Chemical Products Co. for the general recovery of fats from the dish-water throughout the country.

Irish News.

Subscribers are invited to send to the Editor newspapers containing matters of trade interest. The items should be indicated.

Brevities.

Boileau & Boyd, Ltd., Dublin, have obtained the contract for drugs to Dr. Stevens' Hospital, Dublin.

Mr. P. J. D. Fielding, Ph.C., F.C.S., has been elected a member of the Committee of the Cork Chamber of Commerce.

Mr. W. F. Whaley, with S. Connor & Sons, 79 Hill Street, Newry, was presented with a suit-case on the occasion of his departure for Enniskillen. Mr. Whaley was well known as a violinist in Newry.

At Maghera Petty Sessions, John Walsh, Ph.C., Maghera, was summoned for selling acetic acid which was 24.2 per cent. deficient in hydrogen acetate. After the evidence had been heard, the case was dismissed, without prejudice.

At Londonderry Petty Sessions on November 15, Lyons & Co., Derry, were fined 11s. and 11s. costs, in each of three cases against them, for supplying linseed-cake meal which contained foreign substances. In another case the Magistrates agreed with the defendant's solicitor that the Department of Agriculture had no *locus standi* in insinuating proceedings.

Mr. Harry Grainger, Ph.C., late of Graham's Pharmacy, Westmoreland Street, Dublin, and formerly with Evans', Liverpool, has purchased the Callan Medical Hall, co. Kilkenny, and engaged Mr. H. C. Meyrick, Ph.C. (late of Hamilton, Long & Co., Ltd.), to assist him in reopening the business, which was established and conducted for some years by the late Mr. Hugh Montgomery, L.P.S.I.

Analysts' Fees.

The Newry Board of Guardians have agreed to increase the salary of Mr. C. McMillan, the analyst, by 5s. per annum. His present salary is 20s. a year.

The remuneration of Mr. W. J. O'Mahony, analyst to the Middleton Board of Guardians, has been increased from 10s. to 15s. per annum.—Mr. Thorpe, analyst, has declined to accept the 15s. remuneration offered by the Swinford Guardians, but has expressed his willingness to accept 20s. It was agreed to offer him 17s. 10s.—The Local Government Board has intimated to the Lisburn Board of Guardians that sanction cannot be given to a bulk sum as an increase of salary to the drug-analyst, as proposed by the Guardians. Payment of a fixed fee for each sample analysed would be allowed.

Scottish News.

Subscribers are invited to send to the Editor newspapers containing matters of trade interest. The items should be indicated.

Edinburgh.

Dr. J. L. Ewing (Duncan, Flockhart & Co.) has been appointed by Edinburgh Town Council one of the five members of the local tribunal under Lord Derby's scheme.

Customers are now paying the higher prices for patents quite readily. For a week or so many people talked of boycotting patents, but (as another trade experienced) the public soon forget their vows.

Fife.

It is hoped locally that the Insurance Commissioners will take up the case of panel chemists and their qualified staffs in regard to the recruiting canvass, and have them recognised as national necessary workers, so that they may fulfil their contracts with the Government.

The Fifeshire Pharmaceutical Association met at Thornton on Wednesday, November 17, and decided, on the motion of Mr. MacLaren (Kirkcaldy), and seconded by Mr. David Storrar, to refuse to renew their Insurance dispensing agreements in accordance with the terms of the recommendation of the Pharmaceutical Standing Committee (see p. 46). Mr. David Gilmour (Dunfermline)

stated that he had up to now considered that chemists should go on, but he now conscientiously believed that they had passed the limit of endurance, and there was no alternative but to support the Standing Committee.

Glasgow and the West.

At the Court of Session in Edinburgh on November 13, Mrs. Jane Craig, 15 Gayfield Street, Glasgow, obtained a divorce from her husband, Wm. Craig, formerly a chemist's assistant, who left Glasgow in 1908 and is supposed to be abroad now.

The greatest anxiety prevails in the ranks of chemists and druggists throughout Scotland regarding their treatment under the recruiting campaign. Already almost every available qualified man has joined the Colours, and those remaining are essential for national and statutory work.

At a meeting of Glasgow University Court last week, Sir David McVail intimated the offer of a handsome electric clock for the University Tower by Major J. Garroway, chief partner of R. & J. Garroway, manufacturing chemists, Glasgow, who for many years has identified himself with the work of the Glasgow Central Dispensary.

French News.

(From the "C. & D." Paris Correspondent.)

M. PHILIPPE BERTHELOT, who has been selected by M. Briand, the new French Prime Minister, as the head of his Diplomatic Cabinet, is the son of the celebrated chemist Marcellin Berthelot, and brother of M. Daniel Berthelot, Professor of Physical Science at the Paris School of Pharmacy.

FIRST-AID ADVICE.—Dr. Vergnorix, who has published "First Aid to the Wounded on arrival at an Ambulance," is a pharmacist, who was for some time chemistry preparator at the Paris School. The little pamphlet embodies the result of his observations during the fourteen months he has been attached to an ambulance.

TAKING THE WATERS.—A certain number of French Spas are carrying on business as usual in spite of the war, and a campaign has been commenced with a view of making these places, many of them charming, better known to British tourists. Even some Parisians are not familiar with the names of all their home Spas. A good tale is told of a very Parisian actress, who, hearing all her comrades discussing where they were going to spend the summer, declared, "I have been promised a month at the eaux de Botot," oblivious of the fact that she was referring to a mouth-wash.

POISONING-CASE.—A young girl who lived with her parents at Le Vésinet, Paris, fell in love with a soldier. Doubting the possibility of obtaining her parents' consent, she thought that if she attempted suicide her parents would relent. Accordingly she asked a pharmacist to supply her with a dose of poison for a cat, calculating that the amount that would kill a cat would only be sufficient to make her ill. The chemist supplied a biscuit saturated with strychnine solution, which the lovesick girl ate, and from the effects of which she died almost immediately. It is reported that the pharmacist is to be prosecuted for supplying the strychnine.

ARMY PHARMACISTS.—The Under-Secretary of State, as Director of the Sanitary Services of the French Army, has issued a circular to the General commanding each army district, stating that he has decided to attach a pharmacist-major to the Sanitary Board of each district. This major's duties will include the study of all questions relating to the pharmaceutical service (staff, premises, plant) or to alimentary hygiene, the checking of pharmaceutical stores and the disposal of surplus medicaments (human or veterinary), the purchase of similar stores, the checking of pharmacy accounts, analyses, and supervision of district and hospital pharmacies, as well as certain other duties; in short, such officers will relieve the local army surgeons of much work for which they are not specially fitted by training, and leave them free to extend their work for the sick and wounded. Under the new order 304 new second-class assistant-pharmacist-majors have been appointed, and it has now been arranged to nominate a number of auxiliary army pharmacists. The latter will be chosen from mobilised men holding the pharmaceutical diploma, or from pharmacy students of certain standing. These will be called up as vacancies occur.

Scarcity of Drug-supplies.

DRUGS and chemicals are becoming every day dearer and scarcer in France. At the beginning of the war many pharmacies were closed, their owners having joined the Colours. But after a few weeks several were reopened, as Belgian refugee pharmacists, whose diplomas are made valid by the French Government, were allowed to manage French "officines," and lady assistants have taken the places of men. Unfortunately, a good few will shortly close their doors again, on account of the scarcity of chemicals and drugs.

Although pharmaceutical articles may be imported from Allied or neutral countries, provided they are certified made in these countries, and a special Committee, the "Office des produits chimiques et pharmaceutiques," has been appointed by the Government in order to facilitate importing and manufacturing trade of French firms, some chemicals and drugs are already unobtainable or too high in prices. Alcohol is delivered only by the War Office, which has at its disposal the whole production of the distilleries; pharmacists can obtain only a certain quantity every week by special demand. Aspirin, benzonaphthol, potassium carbonate, marshmallow-flowers, and other drugs have disappeared from the market. Thermometers, glass apparatus, enamelled utensils, and rubber articles have reached prohibitive prices. The following are the latest prices quoted by a large wholesale firm in Paris:

| | |
|-------------------------------------|----------------------------------|
| Caffeine, 65s. per lb. | Cocaine hydrochl., 16s. per oz. |
| Guaiacol (cryst.), 23s. 6d. per lb. | Morphine hydrochl., 19s. per oz. |
| Guaiacol carbonate, 40s. per lb. | Adeps lanae, 6s. per lb. |
| Pyramidon, 67s. per lb. | Sodii hyposulph., 7d. per lb. |
| Phenacetin, 50s. per lb. | Iodoform, 25s. per lb. |
| Quinine sulphate, 33s. per lb. | Potassium iodide, 20s. per lb. |
| Magnesia, 1s. 10d. per lb. | Rad. ipecac., 21s. per lb. |
| Bismuth salicylate, 13s. per lb. | Sodium salicylate, 22s. per lb. |
| Carbolic acid, 11s. per lb. | Methyl salicylate, 17s. per lb. |
| Salicylic acid, 21s. per lb. | Salol, 27s. per lb. |
| Potassium bromide, 12s. per lb. | Thiochol, 52s. per lb. |
| Codeine, 4s. 8d. per dr. | Paraffin, melle, 1s. 4d. per lb. |

Many of these will become unobtainable, and small pharmacies, whose stock is exhausted, suffer heavily from this situation; it will stop business very soon. In spite of these high prices, the public pay very willingly, but on account of the scarcity of copper money the chemist has often to use penny and halfpenny stamps to change silver coins.—*V. Renneboog.*

South African News.

(From "C. & D." Correspondents.)

"The Chemist and Druggist" is supplied weekly to members of all the Chemists' Societies in South Africa.

Cape Province.

BUSINESS is still brisk enough, writes our Cape Town correspondent, but we are feeling the pinch more and more in certain lines of drugs and chemicals. Some of the latest quotations are: Acetosol, 7s. per oz.; bromides (sodium, ammonium, and potassium), 25s. to 28s. per lb.; pot. permang., 6s. per lb. The prices naturally go up according to the prices at home, but one wonders what prices these articles will reach ultimately.

MR. J. W. WARE, head of the analytical and laboratory staff of Heynes, Mathews, Ltd., has accepted a similar position with Allen & Hanburys, Ltd., Durban. Previous to leaving England for the Cape Mr. Ware had had a varied experience in the leading London laboratories. His friends in Cape Town regret his departure, but trust that the change will benefit Mrs. Ware, who has lately been in indifferent health. Mr. Ware is a Freemason and has just lately taken his third degree.

Natal.

LOCAL PHARMACISTS are experiencing some delay in delivery of goods ordered from home, many lines being frequently unobtainable in this country.

MR. W. H. GOODBRAND, Hon. Secretary of the Natal Pharmaceutical Society, has sailed to offer his services with H.M. Forces. Before his departure he was presented with a wrist-watch. [We had a call from him.—EDITOR.]

PERSONAL.—Mr. W. Elford Rogers, representing Fassett & Johnson, Cartwrights, Ltd., Grossmith, Son & Co., Bidwell, Bidwell & Co., Ltd., etc., has left Natal for Johannesburg.—Mr. Frank L. Dawber has purchased the business of Mr. George Lacombe.

Legal Reports.

Trade Law.

Attempting to Export Opium.—Three Chinamen were fined 10l. 10s. each, at Liverpool, on November 13, for attempting to export opium. One of them (Lee Kum) was arrested when about to board a steamship at Birkenhead with 6 lb. of opium in his possession. The other two (sailors on a Holt liner) had concealed a quantity of dry opium in a false bottom of a locker. They stated that it was for their own use during the voyage.

Japanese Produce.—The ownership of twenty-five cases of Japan wax and 100 cases of refined camphor seized in London on October 12, 1914, on board the Liverpool steamer *Eumacus*, has come before the Prize Court, and as the shippers were the Japan Exportation Co., a Kobe branch of a German house, which gave the instructions as to shipment of the goods, Sir Samuel Evans condemned it as prize of the Crown.

A Dye Contract.—At the Manchester Assizes on November 16, Mr. Justice Ridley and a special jury commenced the hearing an action by the North British Chemical Co. (England), Ltd., against F. J. Woods & Co., chemical merchants and manufacturers, Hulme, for 3,561l. damages for alleged breach of contract. For milling blue and milling green, well known aniline dyes, it was alleged that the defendants had substituted hematine-dyes.

Sale of Jeyes' Fluid.—Robert Davey, Railway Arches, Wotton, was the defendant in a Pharmacy and Poisons Act case by the Pharmaceutical Society, heard at the Attleborough County Court, Norfolk, on November 15, in respect to the sale of Jeyes' Fluid (containing more than 3 per cent. of carbolic-acid homologues), he not being a registered chemist and druggist. He had paid the Society 5l. by money order, but they wanted the costs of witnesses. As neither party was represented Judge Mulligan, K.C., ordered the matter to stand over until the next Court.

An Arsenious-acid Contract.—In the City of London Court on November 16, before Judge Rentoul, K.C., the case of May & Baker, Ltd., v. W. & S. Bowditch was mentioned. In this the plaintiffs sued the defendants for 4l. damages sustained by reason of the defendants' breach of contract to supply 1 ton of arsenious acid fine perfectly white powder, which defendants failed to deliver, and plaintiffs bought in the market at 18s. per cwt., the contract having been for 14s. per cwt. Mr. Wilfrid Price, plaintiffs' counsel, said that the defendants had paid the 4l. and ordinary costs into court, but the plaintiffs were applying for costs on the higher scale; and, after argument, his Honour allowed the costs on the scale between 10l. and 20l., remarking that plaintiffs were quite justified in what they had done.

A Question of Nationality.—At the Bradford (West Riding) Police Court, on November 11, the adjourned case of Adolph Jaffé, F.C.S. (*C. & D.*, November 6, p. 40), was mentioned. Mr. J. J. Wright, on behalf of the defendant, informed the Magistrates that due diligence had been observed in pressing the application of the defendant to the Home Secretary for a special licence or certificate under Section 4 of the British Nationality and Status of Aliens Act, 1914. The application had been made, and everything went smoothly until that morning, when they were informed that the Home Secretary preferred to allow the petition to stand over until the Magistrates had given their decision on the matter. The hearing was adjourned until Thursday, November 18, when the Magistrates imposed a fine of 5l., and costs, but agreed to state a case.

Selling Ether.—At the Cookstown Petty Sessions, Patrick Brannon, Ballynagilly, was charged, under the Pharmacy Act (Ireland), with selling sulphuric ether by retail, and also with not labelling it "Poison" and with the name and address of the seller. Evidence for the prosecution showed that a Mrs. Bella Hamilton resided near the defendant, and bought a half-pint of ether, for which she paid 1s. Her mother was addicted to ether-drinking, and she made this purchase with a view to putting a stop to the defendant selling it. Mr. Charles A. Wray, Ph.C., certified that the bottle contained sulphuric ether. The defence was that the ether was kept specially for the convenience of Mrs. Hamilton's parents and at their request. The Magistrates unanimously convicted, and fined the defendant 10l. on the two counts, a third of the penalty to go to the prosecutor.

Alsop & Quiller v. Harper.—This was an action remitted from the High Court and heard by Judge Edward Bray in the West London County Court on November 11.

In it the plaintiffs, chemists and perfumers, 137 Sloane Street, Chelsea, sought to recover from Mrs. E. F. Harper 19*l.* 16*s.* 10*d.* for goods supplied. It appeared from the evidence that the defendant had an income independent of her husband, and that the latter denied liability, whereas the defendant had paid her share of the plaintiffs' account (15*l.* 3*s.* 10*d.*), leaving him to pay the balance as she considered he ought to do. The evidence, apart from that given by Mr. Alfred Wiggington, proprietor of the plaintiffs' business, and of Mr. C. E. Roberts, chemist's assistant, who had been in the plaintiffs' employment, was chiefly of a husband-and-wife nature. His Honour, in giving judgment for the plaintiffs, pointed out that the defendant had not pledged the husband's credit; she intended to pay for the excised items if she received money for that purpose, but circumstances had prevented this consummation.

Limited Companies.

New Companies Registered.

P.C. means Private Company and R.O. Registered Office.

GARTHWAITE BROS., LTD. (P.C.).—Capital 7,000*l.* Objects: To acquire the business of F. & W. Garthwaite, manufacturers of and dealers in chemicals and scouring and cleaning materials, at Boothroyd Lane, Dewsbury. The gentlemen named are the subscribers and first directors.

CHEMICAL TRADING Co., LTD. (P.C.).—Capital 1,000*l.* Objects: To carry on the business of chemists, druggists, manufacturers of and dealers in salts, acids, alkalis, drugs, medicines, medicaments, herbs, pharmaceutical, chemical, and surgical materials and appliances, etc., and to adopt an agreement with W. Lewis, 14-15 Coleman Street, E.C. mining-agent, who is first managing director.

BARYTES (MANCHESTER), LTD. (P.C.).—Capital 2,000*l.* Objects: To take over the business of a dealer in mineral, chemical, and dry colour carried on at Irkdale Street Works, Smedley, Cheetham, Lancs, and to adopt agreements with E. Ogden and C. F. Hall. The first directors are E. Ogden (permanent), A. Molesworth, W. Humphreys, and C. F. Hall.

HAWKER & BOTWOOD, LTD. (P.C.).—Capital 15,000*l.* Objects: To take over the business of corvuline-manufacturer carried on by A. E. Hawker at 59 Mark Lane, E.C., to carry on the business of proprietors, vendors, manufacturers of corvuline and other substances, manufacturers of and dealers in chemicals, etc. The first permanent directors are A. E. Hawker (chairman) and W. T. Botwood.

WHITE ROCK CHEMICAL Co., LTD. (P.C.).—Capital 1,000*l.* Objects: To take over the business of J. C. Mather and J. H. Martin (the "White Rock Chemical Co."), Brown Street, Leigh, Lancs, manufacturers of magnesium chloride, Epsom salt, lead acetate, sulphide of soda, acetate of soda, and all chemicals used in the textile trades. Messrs. Mather and Martin are the subscribers and first directors.

ERINOID, LTD.—Capital 50,000*l.*, in 5*s.* shares. Objects: To carry on the business of manufacturers and producers of the article or substance known as "Erinoid," and of plastic materials and substances of all kinds. This company is a reconstruction of Syrolit, Ltd., 53 Coleman Street, E.C., and acquires the whole of the undertaking and assets of that company. The first directors are A. Binnie, J. S. Beauford, F. W. Beck, P. M. Bright, and W. G. Waldron. R.O., 53 Coleman Street, E.C.

Company News.

SHARMAN'S PATENT SYPHON Co., LTD., is being wound up voluntarily, and Mr. A. J. Carey, 49 Queen Victoria Street, London, E.C., is liquidator.

CASNER-KELLNER ALKALI, LTD.—The directors have declared a final dividend at the rate of 24 per cent. per annum for the six months to September 30.

BORAX CONSOLIDATED, LTD.—An interim dividend of 6*d.* per share has been declared, less income-tax at 2*s.* 4*d.* in the pound, on the deferred ordinary shares for the year ended September 30, 1915.

CASSEL'S CYANIDE, LTD.—The directors have declared a final dividend of 2*s.* per share, making 2*s.* 9*d.*, less income-tax, for the year. This is better than last year, for, although 4*s.* per share was paid then, the issued capital has since been doubled.

FAIRWEATHERS, LTD.—At an extraordinary general meeting of Fairweathers, Ltd., chemists, New Ross, co. Wexford, held on November 6, it was proposed by Mrs. Isabella M. C. Fairweather, seconded by Mr. P. A. Jeffares,

"That it has been proved to the satisfaction of this meeting that the company cannot, by reason of its liabilities, continue its business, and that it is advisable to wind up the same, and accordingly that the company be wound up voluntarily." Mr. A. P. Bolger, New Ross, has been appointed liquidator.

J. SAVAGE & Co., LTD.—At the annual meeting of the shareholders of this company at the registered office in Bradford on November 10 the balance-sheet submitted showed an increase of 1,100*l.* on gross receipts and a decrease of 370*l.* in expenses, but the net profits were less by 276*l.* than in the previous year owing to increased prices of commodities dealt in. It is not possible, Mr. G. S. Savage (director) explained, to get corresponding increases from the public. The directors' recommendation to pay a dividend of 10 per cent. on the ordinary shares and 5 per cent., free of tax, on the preference shares was agreed to, and 570*l.* was carried forward.

Gazette.

Partnerships Dissolved.

HARVEY, S., and HAWKINS, E. M., Watling Chambers, Watling Street, Canterbury, analytical chemists, under the style of Harvey & Hawkins

LEACH, R. E. II., and BUSTEED, J. H., Bungay, Suffolk, medical practitioners, under the style of Leach & Busteed.

Bankruptcy Acts.

RECEIVING ORDER AND ADJUDICATION.

BLAKELEY, S. F., 6 East Parade, Dorchester, formerly of Lime Street, Evesham, and Tower Road, Boston, chemist's assistant.

Deed of Arrangement.

Nix, Robert Henry, Marine Drive, Bridlington, Chemist and Druggist. Trustee: P. S. Booth, Bixteth Street, Liverpool, accountant. Dated, November 5; filed, November 11. Secured creditors, 20*l.*; liabilities unsecured, 990*l.*; estimated net assets, 300*l.* The creditors include: J. & E. Atkinson, Ltd. (13*l.*); Ashton & Parsons, Ltd. (3*l.*); Allen & Hanburys, Ltd. (15*l.*); Alf. Bishop, Ltd. (7*l.*); W. J. Bush & Co., Ltd. (14*l.*); The British Drug Houses, Ltd. (16*l.*); Cheshbrough Manufacturing Co. (3*l.*); Eucryl, Ltd. (4*l.*); J. C. & J. Field, Ltd. (3*l.*); D. & W. Gibbs, Ltd. (13*l.*); Goldhill & Son (3*l.*); Icilina, Ltd. (7*l.*); Kodak, Ltd. (3*l.*); J. Morgan Richards & Co., Ltd. (3*l.*); S. Maw, Son & Sons (3*l.*); National Cash Register Co., Ltd. (5*l.*); Oatine Co., Ltd. (3*l.*); Parke, Davis & Co. (5*l.*); Oppenheimer, Son & Co., Ltd. (4*l.*); Sangers (22*l.*); Timpson & Co., Ltd. (5*l.*); A. Wander, Ltd. (3*l.*); Yardley & Co., Ltd. (4*l.*); X. L. Rubber Co. (3*l.*); T. Kerfoot & Co. (4*l.*); Harkness, Beaumont & Co. (3*l.*); Lorthouse & Saltmer, Ltd. (27*l.*); Hirst, Brooke & Hirst, Ltd. (17*l.*); A. de St. Dalmas (13*l.*); Ayrton, Saunders & Co., Ltd. (13*l.*); Evans Sons Lescher & Webb Ltd. (162*l.*); United Drug Co., Ltd. (20*l.*); James F. Wilkinson (18*l.*); Virol, Ltd. (5*l.*); Bovril, Ltd. (3*l.*); W. B. Cartwright, Ltd. (6*l.*); Horlick's Malted Milk Co., Ltd. (17*l.*); York Glass Co. (6*l.*); Bleasdale, Ltd. (13*l.*); and Rames & Co., Ltd. (48*l.*).

Marriage.

Authenticated notices are inserted without charge.

HARRISON—GILLET.—At Flottergate Church, Grimsby, on November 13, Thomas Louis Harrison, chemist and druggist, second son of Mr. G. W. Harrison (Lofthouse & Saltmer, Ltd.), to Pattie Elsie, second daughter of Mr. and Mrs. T. Gillet, of "Fair Glen," Abbey Drive West, Grimsby.

Deaths.

Authenticated notices are inserted without charge.

CLARK.—At Thornton Heath, on November 3, Mr. Robert John Clark, chemist and druggist, aged eighty-three. He and his brother founded the business of Clark & Co., High Street, Dorking, in 1855.

COMFORT.—At 19 Derwent Road, Palmer's Green, London, N., on November 8, Mr. Gilbert Humphrey Comfort, aged seventy-six.

HARWOOD.—At Lewannick, Launceston, on November 14, Mr. T. H. Harwood, chemist and druggist, formerly of Newquay, aged seventy-four.

KEMBALL.—At his residence, Bedford House, Buekhurst Hill, Essex, Francis Robert Kembal (of Kembal, Bishop & Co., Ltd., chemical-manufacturers), on November 14, suddenly, aged sixty-two.

MELDOLA.—At 6 Brunswick Square, London, W.C., on November 16, Professor Raphael Meldola, F.R.S.,



PROFESSOR MELDOLA.

1912 Professor of Organic Chemistry in the University of London. Last July he was appointed Chairman of the Advisory Committee established in connection with British Dyes, Ltd., and has always upheld the importance of research work in chemical industries. He has filled the Presidential chair of the Chemical Society, the Institute of Chemistry, the Society of Chemical Industry, the Entomological Society, and the Society of Dyers and Colourists. He was elected a Fellow of the Royal Society in 1886, in 1913 received the Davy Medal, and was twice a medallist of the Royal Society of Arts. Professor Meldola was the author of many books, among them being "The Chemistry of Photography" and "Chemical Synthesis of Vital Products"; he also edited and translated Weismann's "Studies in the Theory of Descent." His hobby was field natural history, and he also filled the office of President of the Maccabeans. He was buried in the Jewish Cemetery, Golder's Green, on November 18.

SANDERSON.—At 45 Fairfield Road, Edmonton, London, N., on November 3, Mr. Campion Sanderson, chemist and druggist, 220 Fore Street, Upper Edmonton, aged seventy-one.

SANLEY.—Suddenly, at 15 Lowther Street, Whitehaven, on November 7, Mr. Joseph Sanley, chemist and druggist, of Wilson & Kitchin, chemists and druggists, Whitehaven, aged eighty. Mr. Sanley was travelling representative for Wilson & Kitchin, and with the late Mr. John Diekie took over the business on the death of Messrs. Archibald and W. H. Kitchin. The business will be continued by Mr. Sanley's executors.

SKIDMOOR.—Suddenly, at The Crosslands, Nantwich, Cheshire, on November 6, Mr. James Stephen Skidmoor, J.P., chemist and druggist, aged seventy-five. Mr. Skidmoor had been in business in Nantwich for nearly half a century, and was one of the most prominent men in the town. He was an authority on dogs, and in 1881 published a standard work entitled "The Book of the Dog."

TYRER.—The many friends of Mr. Thomas Tyrer throughout the chemical and drug trades will regret to learn that Mrs. Tyrer died at 14 Sandwell Mansions, West-End Lane, Hampstead, London, N.W., on November 13. She was a most devoted wife and mother, and took the keenest interest in her husband's many activities until an illness of a lingering nature shadowed the evening of her days, and she died peacefully last Saturday evening.

Killed in Action.

NEEDHAM.—In France, Private Leonard Needham, chemist and druggist, Grenadier Guards son of Mr. R. Needham, chemist and druggist, Stalybridge, aged thirty-one.

CANNABIS INDICA.—In connection with the Ceylon Government's move to suppress the use of cannabis indica all preparations of the drug in Government hospitals are now being withdrawn.

Personalities.

Authenticated notes are inserted without charge if not in the nature of advertisement, and subject to Editorial selection.

MR. W. J. GREGORY, chemist and druggist, Weymouth, has been elected a member of the Borough Education Committee.

COUNCILLOR J. V. MAINPRIZE, J.P., chemist and druggist, Bridlington, has been elected a member of the Borough Education Committee.

THE LATE WALTER WHITLAMSMITH, chemist, Chatteris, Cambs, left estate valued at 1,683*l.* 9*s.* 1*d.* gross, with net personalty 1,655*l.* 12*s.* 2*d.*

ALDERMAN RICHARD FRIZHUGH, Ph.C., Nottingham, has been elected by the City Council on the Committee of Visitors to the City Asylum.

MR. WESTON POOLE, Ph.C., has been appointed a Manager of St. Giles's and St. George's schools by the Newcastle-under-Lyme Town Council.

ALDERMAN D. T. EVANS, J.P., chemist and druggist, High Street, Margate, has been appointed to represent the Town Council on the Isle of Thanet Joint Hospital Board.

MR. H. D. KELF, Ph.C., The Broadway, Bromley, Kent, has been elected a member of the Public Library Committee by the Borough Council. Mr. Kelf has also served on the local Education Committee for over four years.

MR. JOHN MORGAN RICHARDS, writing from Steephill Castle, Ventnor, I.W., regarding his life-long friend,

The late Brent Good.

whose death in New York on November 11 we announced last week, says: The very unwelcome and unexpected news of the death of Mr. Brent Good will cause grief and surprise to many friends in England, as it certainly did to me. The circumstances are the more tragic owing to the fact that exactly four weeks ago he was in London, and I accompanied him to Euston Station to see him off for Liverpool by the evening train to embark on the following Saturday for New York. He had spent just a fortnight in London, and was certainly in fairly good health and more actively disposed than one ordinarily finds a man at seventy-eight years of age. This announcement brings to an end with me, so far as this world is concerned, a close friendship of considerably more than fifty years. Mr. Good and I were first associated together in the establishment of Demas Barnes & Co. in New York in 1862 or 1863, at that time the largest patent-medicine warehouse in the United States. We were both on the travelling staff. I resigned from this appointment in 1867 to begin my business career in London. Mr. Good remaining in New York with Demas Barnes and Co. until 1868, when the firm was dissolved and the business was purchased by John F. Henry Curran & Co. Mr. Good decided to embark on a new field, and bought an interest and partnership in a wine and spirit business, which was conducted for a number of years under the name of Good, Roof & Co. in Broadway, New York. He continued in this business for five or six years and made one or two voyages to this country and to Spain, making purchases of wines and spirits for export to the U.S.

Mr. Brent Good when a young man was a very remarkable and capable salesman, and was always regarded as one of the most successful and energetic commercial travellers to be met with on the road. His personality was very marked, and he was able to place himself on friendly terms with almost any firm with whom he desired to do business, and his efforts were always well rewarded. I think it was in 1872 or 1873 that, in conjunction with his brother, he purchased the interest in Carter's Little Liverpills. In 1888 he decided to develop this business in England: the agency was brought to my firm, and, as is well known, has been carried on by us ever since.

I may mention, as an item of interest, that in 1890 he purchased the Lyceum Theatre, New York, in conjunction with Colonel Pinekey, proprietor of Humer's Asthma



MR. BRENT GOOD.

curc, and under the management of Daniel Frohmann conducted with success and profit the activities of this theatre for nearly ten years. The strain and excitement proved too great a tax upon his physical energies, and he disposed of his interest in the venture. It is a somewhat singular coincidence that his chief competitor in this country, Sir Joseph Beecham, is proprietor of the Aldwych Theatre in London.

Mr. Good had, I should say, the most extensive acquaintance with wholesale and retail chemists and druggists in the U.S. of any man of the present day, and seemed to know the personal history of almost every concern in existence in the U.S. He always attended the annual meetings of the National Drug Association, and generally favoured the company with one of his offhand, practical, and amusing speeches. He had many warm and sincere friends in London, Bristol, and Liverpool. He was of English descent, both his father and mother being from Somersetshire, but he himself was born in Rochester, in the State of New York. His mother, to whom he was devotedly attached, lived to the amazing age of ninety-three years. Mr. Good's baptismal name was Brent Samuel Humphrey, and these initials, B. S. H., were turned by his friends into "Be So Happy" Good as characteristic of his temperament; but at the time he purchased the Carter Medicine Co. business he decided to drop some of these initials and established his name, by deed if I remember rightly, as Brent Good, and as Brent Good he was known throughout the United States for the last twenty-five years.

Referring to his last visit to London, he arrived in Liverpool from New York on Monday, October 4, and came on to London the same evening. He was in daily attendance at our office, and also called upon many of his London friends. I was unable to meet him in London until October 12, and remained with him until his departure, as already mentioned. We were together at his hotel on the night of the Zeppelin raid, and one of the heaviest explosions was in the immediate vicinity. Naturally he was considerably excited and interested, as I was myself, but beyond the sudden shock and the terrific noise of the explosion we experienced no personal inconvenience. Next morning he collected some pieces of glass from one of the broken windows in the hotel and carried them back with him as a souvenir of his experience of a bomb raid and his nearness to the "firing line."

Mr. Good's gifts as a capable, energetic, and very successful man of business were remarkable, and I am glad to say that in this very long and happy association with him we never had other than the most pleasing relations both on the business and social side of our comradeship. His many friends in England, I am sure, will join with me in very sincere regret at his death. We feel the deepest sympathy with his family. He leaves a wife, one son, and one daughter. His son, Mr. Harry Good, a man of over forty years, has long been associated with the business at the headquarters in New York. He is most capable, and is able to "follow in father's footsteps" in the most practical way.

Business Changes.

Authenticated notes are inserted without charge if not in the nature of advertisement, and subject to Editorial approval.

BOOTS CASH CHEMISTS, LTD., have opened a branch at 9 and 10 Wine Street, Bristol.

W. BLYTHE & CO., Church, near Blackburn, have acquired the works of J. Riley & Son, chemical-manufacturers, Hapton.

COOKE, TWEEDALE & LINDSAY, LTD., chemical-manufacturers, Manchester, have established a London branch at 5 Idol Lane, Eastcheap, E.C.

MR. J. S. ASPELL, chemist and druggist, Douglas, I.M., has purchased the stock and prescription-books of Mr. T. S. Qualtrough, chemist and druggist, of the same town.

C. E. BEVERIDGE & CO., who succeeded to the business of the late Mr. A. W. Morgan, chemist and druggist, 7 Railway Street, Chatham, have refitted the pharmacy on modern lines.

DR A. M. SALTER (Bermondsey) was the principal speaker at a meeting of panel practitioners at Bristol on November 11, which decided to form a local branch of the Panel Medico-Political Union. In reply to a question, he said he had never written a prescription in duplicate in his life! The meeting decided that the proposed Medical Benefit Regulations are a breach of faith with panel practitioners, who will refuse to consider them.

Trade Notes.

CAVE & HIGGIN, LTD., 23 Hardman Street, Manchester, offer all kinds of rubber and vulcanite surgical goods.

SANTONIN.—Carnegie Bros., 33-35 Charterhouse Square, London, E.C., inform us that in spite of the general scarcity of santonin they hold a large stock.

JOHN LORIMER, manufacturers' agent, 119 Finsbury Pavement, London, E.C., has a new telephone number—namely, 2215 London Wall—which buyers will please note. Mr. Lorimer is the distributing agent for the Willesden Chemical-works' acetylsalicylic acid.

PHOTOGRAPHIC CHEMICALS.—Johnson, Matthey & Co., Ltd., 74-81 Hatton Garden, London, E.C., have a world-wide reputation as manufacturers of silver nitrate specially suited for making photographic emulsions. Some of the grounds upon which this reputation is based are mentioned in their announcement.

FELICE BONAVENTURA & Co., 98 Great Tower Street, London, E.C., are in a position to supply a number of pharmaceutical products, including chemicals, essential oils, drugs, and wool-fat. They are also the agents for the synthetic chemicals manufactured by A. W. Schwarz, Zurich, and for the orris products made by A. Migono & Co., Milan.

IODISED THROAT-LOZENGES.—A. H. Cox & Co., Ltd., manufacturing chemists, Brighton, have produced a new line in iodised throat-lozenges, and are packing these in bottles and cartons for retail sale. The lozenges are in tablet-form, and contain iodine, carbolic acid, menthol, citric acid. The iodised throat-lozenges are used for the prevention and cure of sore throats.

THE NATIONAL CASH REGISTER CO., LTD., 225 Tottenham Court Road, London, W., make another of their characteristic and topical announcements in the *C. & D.* this week, this one being about cash conservation as effected by the National Register. Subscribers who want information in regard to the terms upon which the register is supplied are requested to fill in the coupon which they will find in the advertisement.

STEARNS' PEPSIN.—Frederick Stearns & Co., Detroit, Michigan, U.S.A., and 35 Snow Hill, London, E.C., are inviting attention to the animal products in which they specialise. These include pepsin and allied substances. Both scale and powdered pepsin are offered in various strengths from 1:2500 to 1:10000, other products being diastase, pancreatin, hæmoglobin, beef peptone (powder or paste), thyroid glands, and powdered oxgall. Messrs. Stearns' business was established in 1855, since which time an accumulated experience in the manufacture of pharmaceutical preparations enables them to guarantee goods of the highest quality and at competitive prices.

CHRISTMAS WINDOWS.—Chemists often experience a difficulty in providing suitable inscriptions and showcards for a Christmas window-display. These are necessary to attract attention and to give the seasonable touch. In this connection we call attention to the list issued by Dudley & Co., Holloway Road, London, N., which meets this want effectually. The list contains over a hundred designs in window-posters and tickets. The illustrations enable the chemist to pick out those which are most suitable for his neighbourhood. The movement for early Christmas shopping can be considerably stimulated by means of appropriate advertising matter, such as is offered by Messrs. Dudley.

RATS IN THE TRENCHES.—We read the other day in a published letter from a soldier at the Front that our men in Flanders amuse themselves, when they have nothing else to do, by testing their skill with the gun and bayonet in killing rats. We had not realised how numerous in the trenches these pests are until we received the other day from Mr. Thomas Harley, Perth, the manufacturer of "Rodine," a copy of a letter that was sent to him by a R.F.A. sergeant, dated November 1 (printed elsewhere in this issue), in which he says that rats are a plague on the battlefield, and during the recent cold weather they have all flocked to the dug-outs, making matters very uncomfortable for Tommy, but, thanks to "Rodine," the whole lot have cleared off. Another present for Tommy—"Rodine."

CAPPING-SKINS.—We have received from Mr. Leslie Gates, 18 Heyworth Road, Clapton, N.E., specimens of skins which he prepares specially for capping-purposes. The snow-white opaque baudruche skin is like white kid, and has a grain upon it which makes a particularly handsome capping for perfumes or any medicinal speciality. Mr. Gates also supplies white split skins, as well as perfectly transparent skins from the same material, which also is

economical and particularly suitable for capping-purposes. It is interesting to note that these skins are manufactured in England under Mr. Gates's personal supervision, he being the sole manufacturer in this country. From particulars which he has submitted to us it appears that this material is one of the most economical of bottle cappings.

NARCOTICS FOR INDIA.—Oppenheimer, Son & Co., Ltd., 179 Queen Victoria Street, London, E.C., have received official intimation from the Government of India that, in accordance with the Customs and Excise Regulations allowing the importation into India without restriction of medicinal preparations containing cocaine (see *C. & D.*, August 21, p. 41), the following preparations are covered by the description in items 16 and 17 of the Order:

- (1) Cocaine hypodermic tablets:
 - (a) Hydrochloride and cocaine 1/16 gr.
 - (b) Homatropine and cocaine.
 - (c) Atropine and cocaine.
 - (d) Pilocarpin and cocaine.
- (2) Aromatic throat-tablets containing menthol, myrrh, krameria, and cocaine 1/32 gr.
- (3) Asceptoids nasal (Dr. Macnaughton Jones), each containing 1/16 gr. of cocaine hydrochloride.
- (4) Renaglandin with cocaine, each fluid drachm containing 1/16 gr. of cocaine hydrochloride.
- (5) Ung. renaglandin with cocaine.
- (6) Ung. renaglandin with anaesthetic.
- (7) Cerettes, Dr. McGillivray's formula, an ointment composed of nitrate of mercury, atropine sulphate, and cocaine hydrochloride.
- (8) Nebolino compounds Nos. 2, 5, 9, 10, 20, each containing cocaine in association with menthol, camphor, and oil of Scotch pine.
- (9) Rectones of renaglandin with cocaine.

Insurance Act Dispensing.

A Record of matters concerning Chemists' interests in the National Health Insurance Acts.

Reports from Local Centres.

With special reference to the supply of medicines and appliances. See also Associations' Winter Session.

ENGLAND.

Buckinghamshire.—The Insurance Committee resolved on November 13 that the agreements proposed for 1916 are unfair to chemists, and that the Committee protest and ask the Commissioners to allow the present rates to remain in force in this area.

Cumberland.—Mr. T. W. Townley has issued to panel chemists a printed report of a meeting of the Pharmaceutical Committee on November 8, which substantially consists of a statement regarding the new Tariff and its origin, and reminds chemists that any of them who desire to come off the panel must give notice in writing by December 3. Appended is a report of dispensing in the county during the second quarter of the year. The average cost per prescription was 9¹/₂d., Brampton, with 194 prescriptions averaging 5¹/₂d., being lowest, and Penrith (925) and Keswick (709) highest at 12⁷/₂d. per prescription. In Workington 5,674 were dispensed at 9¹/₂d., Erith and Whitehaven were next to the top—4,058 at 8³/₂d.

Derby.—The Insurance Committee on November 17 decided to comply with a request of the Pharmaceutical Committee to give the Panel Committee fourteen days' notice for the total abolition of "Rep. mist." The Committee approved of a reply by the Clerk to a letter from the Commissioners in regard to *ex-gratia* grants to chemists. He had informed the Commissioners that the Pharmaceutical Committee made an exhaustive scrutiny of the 1914 prescriptions, and could not place a charge of wilful extravagance against any individual prescriber. Hence Article 40 had been conformed to.

Derbyshire.—A deputation from the Pharmaceutical Committee has made representations to the Finance Sub-Committee of the Insurance Committee regarding (a) the means of turning to account the data revealed by the statistical analysis of prescriptions; (b) the subject of an increased allowance for administrative expenses; (c) the withholding of one-third from the amount of the chemists' accounts; and (d) the payment of the final instalment of 100% of the allotment for administrative expenses for 1915. The deputation was requested regarding (a) to submit specific complaints in writing, when the matter would be considered, (b) formally to apply for a larger allotment, when the Insurance Committee would consider the question after obtaining the opinion of the Panel Committee. In regard to (c) the deputation was informed that the Committee is powerless in the matter, and does its

best to meet the situation by paying two-thirds of the amounts of the accounts within one month; and regarding (d) that on formal application, with statement of expenditure, the amount would be forwarded.

Essex.—The Pharmaceutical Committee on November 9 decided to recommend acceptance of the new Tariff provided that it will also incorporate such additional provisions as may be agreed upon between the Insurance Committee and the Pharmaceutical Committee and approved by the Commissioners. Each panel chemist is to be so informed. The Essex Insurance Pharmacopœia was discussed with a view to improving the next edition, and various suggestions were made, but this does not alter in any way the firm stand taken by the Committee against stock mixtures. The Conference delegates reported on their mission.

Hampshire.—Mr. S. G. Bartlett presided at a meeting of the Pharmaceutical Committee at Winchester on November 10, when, after explanation of the new Tariff by him and Mr. Griffiths, the prescription-checker, and a discussion by the members, it was resolved to recommend panel chemists to accept service for 1916 subject to the aqua note being deleted. The Chairman and Secretary (Mr. C. H. Baker) were appointed to meet representatives of the Panel Committee in regard to stopping repeat prescriptions.

Herefordshire.—A special meeting of the County Insurance Committee was held at Hereford on November 16 to consider a letter of protest from panel chemists against the proposed Tariff for 1916. The letter pointed out that, while in agreement on the general principles of the proposed Tariff as regards drugs and appliances being charged at cost price, it was felt that the fee of 2.3*l.* for compounded liquid preparations is totally inadequate, and would be a considerable loss to the panel chemists. The 0.8*l.* establishment charge was also strongly condemned. The chemists asked for a minimum fee of 4*d.* for dispensing compounded liquid preparations, and a minimum fee of 3*l.* for all un-compounded preparations, including establishment charges. They further asked that appliances should bear the same proportion of profit as under the 1915 Tariff, inclusive of establishment charges. Unless these requests were acceded to, the chemists could not see their way to continue on the panel for 1916. The Chairman sympathised with the chemists, and Mr. Jackson (Chave & Jackson) gave figures to show that a Hereford chemist had dispensed 6,600 prescriptions at 5*d.* per hour, allowing fifteen minutes for each prescription. The Committee agreed to refer the matter to the Commissioners. Asked whether there was any central body which could act on behalf of the chemists, Mr. Jackson said there was, but unfortunately it had only one object in view, and that was to carry out the Insurance Act.

Middlesex.—A meeting of the Middlesex Pharmaceutical Committee was held on November 10 at Westwood House, High Holborn, London, Mr. Herbert Skinner in the chair. A discussion arose out of the correspondence from Associations on the defects of the new agreements, some misunderstanding having arisen. This was explained, and it was agreed to support the finding of the Conference, with the proviso that members should be circularised on the question of providing evidence to show that the establishment fee is too low. The new clause suggested officially for inclusion in the agreements was agreed upon, and the Secretary instructed to forward the same to the Insurance Committee. A question of pricing when two bottles of the same mixture are ordered on a prescription was raised, and it was unanimously agreed that they should be priced separately, and instructions were given to this effect to the Joint Checking Committee.

Norfolk.—The Pharmaceutical Committee on November 10 passed unanimously a resolution strongly protesting against the new Drug Tariff on the ground that the suggested remuneration was totally inadequate. The County Insurance Committee on November 13 unanimously agreed to protest against the proposed changes in the remuneration of chemists, and to ask the Commissioners to allow the present rates to remain in force in their area, as the members believe that the present rate of profit is fair and reasonable.

Oxfordshire.—In consequence of a ruling by the Commissioners, the Medical Benefit Sub-Committee has recommended to the Insurance Committee that the practitioner who made a charge for antioxin supplied to an insured patient should be asked to refund the money paid.

Peterborough.—The Soke Insurance Committee added the name of Mr. F. Calder, chemist and druggist, Cowgate, Peterborough, to the chemists' panel on November 10. At the previous meeting the Committee had agreed to supply an insured person with an elastic stocking, but

the Commissioners had disallowed it. An amusing little talk followed among the members as to who is to be surcharged for it.

Preston.—The *ex-gratia* payments made to panel chemists amounted to 1,096*l.* for 1913 and 822*l.* for 1914.

Salop.—The Salop Pharmaceutical Committee met at the County Café Assembly-rooms in Shrewsbury on November 11, Mr. W. Gowen Cross presiding. The new Tariff was discussed, and it was unanimously agreed to request the Insurance Committee to include in the agreements the proviso:

"That it should also incorporate such additional provisions as may be agreed upon between the Insurance Committee and the Pharmaceutical Committee and approved by the Commissioners."

It was also resolved to make a trial of the new conditions for a year, so as to discover whether or not it is sufficiently dignified and profitable to continue Insurance dispensing.

Sheffield.—Mr. H. G. Williams presided at a meeting of the Pharmaceutical Committee on November 15, when it was intimated that the war drugs list is not to be extended. The Committee confirmed the Secretary's action in applying for a clause to be inserted in the Drug Tariff as provided for by paragraph 19 of the Commissioners' Memo. 217/I.C. and his application to the Insurance Committee for assistance to retain their present staffs for Insurance dispensing. Following a letter from the Insurance Committee in regard to extravagant prescribing, the Secretary was instructed to reply that the present system of doctors holding stocks of dressings has been unsatisfactory, and asking that the old system of supplying emergency dressings to the individual patient be reverted to, as some doubt still exists in the minds of the local Insurance officials as to dispensing-fees in pricing of prescriptions. He was also instructed to seek a definite answer as to the attitude likely to be adopted by the Committee, stating that chemists are accepting the Tariff on the definite understanding that a duplicate prescription shall be supplied; also to ask that doctors be requested to sign each prescription personally. After discussion of Lord Derby's recruiting scheme it was decided to appoint the Chairman, Secretary, and Mr. J. Gilbert Jackson as a Committee to seek an interview with the local tribunal on recruiting and place before them the general situation on the positions of pharmacists as to Insurance and other dispensing.

Southampton.—Chemists are to be paid 90 per cent. on account of the amounts of their October accounts.

West Bromwich.—The Insurance Committee has made advances of 90 per cent. to chemists in respect to the July-September quarter—altogether 230*l.* 18*s.*

West Hartlepool.—Chemists' accounts for the third quarter of 1915 have been paid in full.

Yorkshire.—The West Riding Pharmaceutical Committee met at Leeds on November 16, when, among other business, it was decided to inform the Insurance Committee that as West Riding chemists are strongly opposed on principle to stock mixtures, unless action is taken by other bodies, they will maintain the *status quo ante*. It was agreed that a general meeting of chemists should be held at the Grand Central Hotel, Leeds, on Wednesday, November 24, at 3 p.m., to discuss the pharmaceutical position under the new Tariff.

SCOTLAND.

Pharmaceutical Standing Committee.

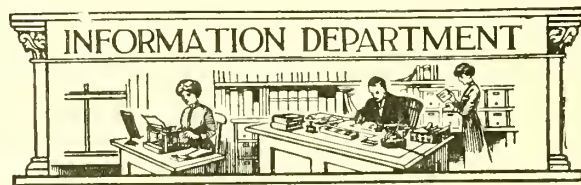
Mr. Thomas Guthrie presided at a meeting held at 75 York Place, Edinburgh, on November 15. Others present being Messrs. Bell, Bennett, Cox, Drummond, Forbes, Giles, D. Gilmour, Kitchin, McNab, McVitie, Reekie, Simpson, Yule, J. P. Gilmour, and John Muir. The chief business was to consider a communication from the Scottish Commissioners conveying the reply of Mr. Roberts, M.P., to the Committee's representatives (*C. & D.*, November 6, p. 56). Mr. Roberts rejected the offer made by Scottish panel chemists which had been accepted by the Scottish Association of Insurance Committees and insisted on Scottish panel chemists continuing the present agreements up till the end of June 1916, the Standing Committee undertaking an inquiry as to the correctness or otherwise of 0.8*d.* as the establishment charge, and that the Government would introduce the new Drug Tariff from July 1, 1916. The Standing Committee had since had a long conference with the Scottish Insurance Commissioners, contending that there is nothing in Scottish conditions to prevent the Commissioners carrying out what they themselves say would be the preferable method—namely, to postpone the whole question of the Drug Tariff till the war is over. The English conditions, it was also urged, do not occur in Scotland, for which and other reasons Scottish panel chemists certainly could not continue service without an assurance that no attempt would be made to force upon

them during 1916 the Drug Tariff recommended by the Departmental Committee on a one-sided, inadequate, and misleading report issued without sufficient deliberation and seriously dissented from by all the pharmaceutical representatives on the Departmental Committee, and particularly by those acquainted with Scottish conditions. It was therefore decided to intimate to the Scottish Commissioners that, having endeavoured in all seriousness and with a full sense of responsibility to consider deliberately the best course to adopt, they were forced to say their minds were made up. They repeated that there was no real reason for any change in Scotland during 1916. They were making no financial demands and asking for no Treasury guarantee. They would deeply deplore a stoppage of pharmaceutical services at so critical a time, but those who insisted on an unnecessary change must bear the full responsibility for the consequences. The Standing Committee resolved to communicate immediately with all Pharmaceutical Committees so as to secure united action by Scottish panel chemists in declining to continue pharmaceutical service after December 31, 1915.

WALES.

Glamorgan.—A report on the analysis of the prescriptions for the six months ended July 11, 1914, recently presented to the Insurance Committee, shows that the average cost per insured person varied considerably among doctors practising in the same districts. The average cost per prescription during the period was 9.44*d.*, the highest figure for any district being 11.89*d.* The average cost per insured person worked out at 1*s.* 8½*d.* It was stated that the chief causes of the severe drain on the Drug Fund were: (a) Excessive ordering of dressings and bandages; (b) ordering of expensive drugs; (c) the prescribing of proprietary articles; and (d) the ordering of large quantities of malt extract and cod-liver oil. Attention was also directed to certain anomalies in the Tariff and to the charging by some chemists of both dispensing and emulsion fees for cod-liver-oil emulsion. Regarding the latter statement, it was pointed out by a pharmaceutical deputation at a meeting of the Insurance Committee that chemists were entitled to these charges. It was suggested that the clause relating to this should be deleted, but, on discussion, it was allowed to stand. The report also pointed out that there had been lack of consistency in allowing or disallowing dispensing-fees, proprietary articles, etc.

Newport (Mon.)—The Insurance Committee on November 17 considered a letter from the Welsh Insurance Commissioners suggesting the statistical analyses of prescriptions dispensed by chemists in the area during 1913-14. The Newport Panel and Pharmaceutical Committees object to bear a portion of the cost of analysis for 1913. The Panel Committee is willing to consider the 1914 analysis, but the Pharmaceutical Committee is not. It was resolved by the Medical Benefit and General Purposes Sub-Committee that in view of the insufficient administrative allowance of the Committee the prescriptions dispensed during 1913-1914 be not analysed. The Panel and Pharmaceutical Committees are each prepared to bear a third of the cost of checking and statistical analyses of 1915 prescriptions, the former body inserting a proviso that the work be done locally and not by a central bureau. It was decided to ask Mr. Padget, the checker, what the cost will be.



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|--|---|
| 33/13. Veterinary "Pink Heel Ointment." | 35/53. Metal tubes for eyebrow pencils, etc.: supplies. |
| 37/32. Nasal atomizer, rubber bulb with glass nozzle bearing the name "Tom Pounce" or "Tom Thumb": makers or agents. | 36/18. Yohimbin bark-importers. |
| 39/19. Thermos socks. | 7/34. Window-steaming preventive. |
| | 29/11. McCarrison's vaccine for goitre. |
| | 69/73. Pre-digested olive oil. |

Observations and Reflections.

By Xrayser II.

The New Tariff

and agreement forms have not yet reached me, but your report is distinctly disappointing. The improvement in prices appears to be infinitesimal; the fees—the most important consideration of all—remain as they were; the only substantial amendment, as far as I can see, is the leaving for monthly revision of the prices of such drugs as are specially liable to fluctuation. As these will presumably be priced from time to time on the same principle as the rest, we are left very much as we were when the Conference broke up. I presume that the undertaking to revise the establishment charge in June still holds, but I attach little value to that. The Society's self-satisfaction does not, in face of its past achievements, inspire me with any confidence in its future action. The achievements have been mostly of the nature of "strategic rectifications of the front," or, in franker language, of retreats, every one of which was a confession of failure. Your leader of last week suggests that the canny Scot has chosen the wiser course in rejecting these new proposals. He, indeed, has not been discounted as we have, but it is possible to pay too dearly for immunity from this liability. I congratulate

Mr. Body

on his defence of the attitude he has taken up. His last letter is clear and convincing as far as it goes, and I am heartily with him with regard to the Federation of Pharmaceutical Committees. These Committees should be the best judges of what our remuneration ought to be, and their united voice would be the most effective advocacy we could possibly have. But we are faced by what looks very much like a *cul de sac*. We are committed to an acceptance of the situation, and in any case it would be a dereliction of duty as patriotic Englishmen to retire *en bloc* from the panel just now. We are, however, assured that no further money is forthcoming for Medical Benefit; the Government has announced that nothing further will be allocated to make good the shortage of Insurance funds, whether for tuberculosis patients, Approved Societies, or chemists. Commenting on this "ugly fact" as it affects the tuberculous, the "New Statesman" says: "Mr. McKenna will have to recognise that it is as necessary to meet all obligations to insured persons as it is to meet the interest on Consols," but we may be quite sure that no further obligation to us will be recognised. "Economy" is the order of the day, and we are among its first victims. What, then, is the use of further action? It may be useful in securing a better economy within the limits of the existing fund, but that is the utmost we can expect.

Chemists' Almanacs

are now in course of preparation, but it is not too late to make a few suggestions; indeed, I have been asked by a friend to do so, though not here. It has always been my opinion that from a personal point of view the almanacs supplied so generously by publishing firms may be overloaded with foreign advertisements; one's own preparations may be, to a certain extent, swamped, whereas they ought to be the most prominent. Next after them should come the articles for which we are agents; of others the less there are the better. The great thing in an almanac of this kind is that it should be distinctive, and to this end there should be as much local literary matter as possible, and it should be as good as it can be made. Local information on such matters as railway times, postal arrangements, and lists of local officials of various kinds is not enough. Something should be added which smacks of the pharmacist himself, something in which his own personality may be found. We need not imagine ourselves men of letters, but a few notes on things relating to our calling, in which our interest in something beyond its merely commercial side may be shown, adds greatly

to the value of an almanac, even from the commercial point of view. This year the war will suggest many topics of this kind. I doubt, however, whether anything would so tend to make an almanac popular as brief biographical notices of local men who have fallen in the war, or in any way distinguished themselves in connection with it. In most cases their friends would be eager to supply matter for these, and the interest they would excite would be widespread and lasting.

Medical Ethics

are no concern of mine, since they do not seem to have any relation to pharmacists. If they have, the fact was ignored by the General Medical Council when discussing the subject last week, and this is quite in accord with the treatment I have more than once received from members of the profession with whom circumstances have brought me into collision. The G.M.C. was, however, good enough to lay down ethical rules for us in the matter of the sale of laudanum. I agree that the recommendation of the Pharmaceutical Council was not above criticism. I should say that when a regular purchaser of laudanum applies for it the supposition is that he wants what he had before, and that the best course is to supply that, whether it is definitely asked for or not. Otherwise there is a risk of his overdosing himself, however carefully he may have been warned. It is somewhat curious that we try to prevent overdosing with whisky by reducing the strength; with laudanum, by increasing it. It is not to be understood that all regular purchasers of laudanum are sufferers from the opium-habit; and, of course, what I have said does not refer to those who are unacquainted with the drug.

The Behaviour of Hydrogen Peroxide

in milk is exceedingly curious, and it need be no surprise that peroxide, added to a fresh milk even in the small proportion of 0.2 per cent., was still present in estimable proportion after the lapse of eighteen months (*C. & D.*, November 13, p. 34). But suppose the milk were not fresh the peroxide disappears much more rapidly, while if it were fresh, but contained the products of disease, the oxygen would also be rapidly evolved. I do not know whether Mr. Hinks advanced any theory to account for these facts, or whether the peroxide test is to be relied on for quantitative purposes. It has been stated that the amount of oxygen evolved by the test furnishes a guide in tracing the source of epidemics of diarrhoea, vomiting, etc., caused by milk from diseased animals. According to some observers good, clean, fresh milk, added to 5 c.c. of a 1-per-cent. solution of hydrogen peroxide, liberates about 30 c.mm. of oxygen in two hours, whereas stale milk, sour milk, milk containing pus or blood, and milk from animals suffering from inflamed udders, fevers, etc., liberate as much as 60 c.mm. in half an hour. If, therefore, a sample of milk is found to liberate more than 35 c.mm. of oxygen in two hours, it ought to be looked on with suspicion, and its source, history, and microscopical and bacteriological characters ought to be carefully investigated. This is a simple test that any pharmacist may apply, provided it is reliable.

In View of Mr. Hinks's Results,

peroxide toilet-creams may not be so unscientific after all, particularly those that depend on casein for their basis. I have hitherto looked with suspicion on mixtures of any organic preparation with hydrogen peroxide, but if they can be guaranteed to contain a proportion of peroxide for eighteen months even the most conscientious pharmacist need not worry about putting up a speciality of this kind. The general belief that peroxide would be incompatible with a cold-cream may account for the fact that we so seldom see any formulas published, though I notice several in "Pharmaceutical Formulas," that mine of information on all that pertains to the craft. If it can be proved that lanoline and peroxide are compatible, and there is no reason why they should not be, there would be a run on the idea, while an oxygenated glycerin and rose-water ought to form the basis of a tempting advertisement.

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NOTICE IS HEREBY GIVEN that on and after December 1 next, new terms of supply to the Trade will apply in respect of all Retail



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Editorial Articles.

Retrospect and Prospect.

WHILE the retail drug-trade of Great Britain watched the ebb of the old pharmaceutical *régime*, and the coming of the new era in the practice of pharmacy which was to begin on January 1, 1869, consequent on the enforcement of the Pharmacy Act, 1868, there was issued from the "Chemist and Druggist" office, London, the first edition of "The Chemists' and Druggists' Almanack and Pharmaceutical Text-Book," 1869. It was a small octavo book, measuring 7 in. by 4½ in., containing eighty-eight pages of printed matter, and a preface to the following effect:

"It seems somewhat singular that an important trade like that of the Chemist and Druggist should have remained so long without a special Almanack. The present attempt to supply this want has been greatly aided by the advice and assistance of numerous friends, to whom the Editor wishes to offer his best thanks."

One of the "features" of the little volume was a series of short essays, under the title "Friends in Council," contributed by Professor Bentley, F.L.S., H. B. Brady, F.L.S., D. Hanbury, F.R.S., and Joseph Ince, F.L.S. Another was "Digest of the Principal Acts of Parliament Affecting Pharmacists," a notable title in so far as this word "pharmacist" was first used by THE CHEMIST AND DRUGGIST some years before as a title for those trading as chemists and druggists, and it was first protected by law on January 1, 1869, but reserved for pharmaceutical chemists. Happily it reverted to its original purpose in the Act of 1908. This first Pharmaceutical Text-book, as its sub-title had it, is brought to our recollection by the fact that this week we have completed the preparation of the forty-eighth annual issue, which we hope to deliver to all our subscribers at home and abroad before the end of the year. Our subscribers are aware that we present a copy of this handsome annual volume to each of them whose subscription is in force in December. We heard the other day of a provincial firm who have among their most treasured possessions a copy of the 1869 issue, and we know a pharmacist who saves his library space by making quinquennial volumes out of the literary sections; for it is characteristic of "The C. & D. Diary" that while a large part of the contents is on perennial subjects of recurring interest, all of it is treated *de novo* every year, and never less than one-third is composed of special new monographs. For example, "The Art of Dispensing" characterised one year, "The Art of Pharmacy" another; when Farmer v. Glyn-Jones was decided formulas for "Known, Admitted, and Approved" remedies were the feature of the 1904 edition; a few years later the respondent in that action, having been called to the Bar, contributed a monograph on the Trade-marks Act; and other lawyers have

contributed from time to time, the 1869 article on "The Patent-medicine Stamp and Licence Acts" being, in fact, a forerunner in this respect. We find that nineteen Acts of Parliament were then dealt with in the "Pharmaceutical Text-book." In the 1916 edition at least seventy Acts which affect the chemical and drug trades, directly or indirectly, are epitomised, without mentioning those legal subjects, such as contract law, which also affect them, and which are covered by numerous Acts of Parliament. During the past year we have on the occasion of momentous national events had singular proof of the high regard in which the information thus given by the *C. & D.* is held by authorities and among leaders in pharmacy; but it is to the men who buy and sell that we particularly appeal—the men behind the counter—and we feel sure that to every one "The *C. & D. Diary*" for 1916 will be "a guide, philosopher, and friend."

Export Prohibitions.

SINCE prohibitions of exporting certain goods from the United Kingdom began under war conditions fifteen months ago, no greater trouble has been caused than there has been during the past ten days consequent upon the Customs authorities (under Government orders doubtless) requiring exporters to tell them whether or not goods tendered contain any prohibited article; in short, whether they are or are not what chemists and druggists know as admixtures or preparations. For example, blue-black ink in a consignment of stationery holds the whole parcel up, because the Customs want the consignor to tell whether or not the ink contains a dye. If it does the ink cannot be exported, because, according to the Customs or those who instruct them, it is

"Dyes and dyestuffs manufactured from coal-tar products."

That is the entry in the prohibition list. The significance of this interpretation (with which we are familiar since the High Court decision in the *Pharmacy Act case Pharmaceutical Society v. Armonson*) began to be specially felt in the drug-business when exporters of medicines were asked by the Customs officials last week if the proprietary medicines which they desired to ship contained any prohibited articles. Nobody could tell that but the makers, and a glance at the following list of medicinal substances which are on the prohibitory list will suffice to show what a stupendous responsibility the authorities are placing upon exporters:

| | | |
|--|-----------------------------|------------------------------|
| Acetanilide. | Cyanamide. | Paraffin wax. |
| Acetates. | Diethylbarbituric acid | Paraldehyde. |
| Acetic ether. | Emetin. | Phenaectin. |
| Acetylsalicylic acid. | Ergot of rye. | Picric acid. |
| Aconite. | Ether. | Potash, caustic. |
| Ammonia. | Eucaine hydrochlor. | Potassium cyanide. |
| Ammonium nitrate. | Gentian. | Potassium perman-ganate. |
| Amyl acetate. | Glycerin. | Protargol. |
| Antipyrine. | Henbane. | Quinine. |
| Belladonna. | Hexamine (urotrobenzoates. | Saccharin. |
| Benzoic acid and benzoates. | pin) and its preparations. | Salicylic acid. |
| Bromine and bromides. | Hydrobromic acid. | Salol. |
| Caffeine. | Hydrochloric acid. | Salvarsan. |
| Cantharides. | Magnesium chloride | Santonin. |
| Capsicum | and sulphate. | Sulphonal. |
| Carbolic acid. | Mercury and its salts, etc. | Sulphur. |
| Chloral. | Neo-salvarsan. | Tartaric acid and tartrates. |
| Chloralamid. | Nitric acid. | Thymol. |
| Chlorates, perchlorates, and nitrates, all metallic. | Nitrotoloul. | Trional. |
| Cinehoaa. | Novocain. | Turpentine. |
| Coca and its alkaloids. | Oils and fats (numerous). | Urea and its compounds. |
| Collodion. | Opium. | Zinc chloride and sulphate. |
| Cresol. | Oxalic acid. | Wax. |
| | Paraffin, liquid. | |

This is a mere selection from the list, but it suffices to show that if the "preparations" principle is strictly inter-

preted it will hold up, perhaps irreparably damage, the whole export drug-trade, and not merely the patent-medicine business as suggested by a correspondent. No official regulations have been issued, but we understand that private instructions have been given to the Customs officials by the War Trade Department at Whitehall that no proprietary medicines may be shipped abroad without a specific declaration as to their exact composition. We consider that reasonable notice should have been given. This would have averted the present *impasse*, thousands of pounds' worth of proprietary medicines being held up indefinitely at the docks, for which fresh arrangements will have to be made as regards shipment. Hitherto proprietary medicines have been allowed to be exported merely on the shipper stating that the goods were not on the prohibited list, which we consider to be safe and sufficient in the majority of cases; it is certainly incomprehensible to us that any Government Department should suggest that manufacturers of patent medicines deposit with them the formulæ for these medicines. Nevertheless, this is put forward as an official proposition. Steps are being taken to make the position of manufacturers clear to the War Trade Department. We consider that they should have a general licence for exportation, not on disclosure of the formula, but on declaration of the presence, or otherwise, in them of articles which are on the prohibited list—a maximum limit being allowed without declaration; we question, indeed, if there are powers to hold up all such compounds. Common sense will eliminate from suspicion the great bulk of them, they are known not to be the *articles prohibited*, their uses are known, and their destination is principally within the Empire.

Since the foregoing was written the Secretary of the London Chamber of Commerce has issued a circular on the subject, in which it is stated:

"This matter is of such importance that a special meeting of members and others interested, including manufacturers, wholesale houses, export shippers, etc., will be held at these offices on Monday, November 22, at 2.30 p.m., to consider the position and what action shall be taken, at which your attendance or representation is specially desired. In the meantime it is specially desired that any firms, companies, or individuals who have experienced any delay or refusal on the part of the Customs to allow the export of the articles with which they are concerned, will send full particulars to the Chamber prior to the meeting, with copies of any correspondence with the Customs."

Insurance Dispensing Agreements.

Any contractor from whom an Insurance Committee does not receive by December 3 notice in writing of his desire to remove his name from the panel as from the end of the current year will be deemed to have undertaken the supply of drugs, etc., for 1916 on the revised terms.

WE repeat this official intimation. As the date draws nearer the conditions do not improve. The Pharmaceutical Standing Committee (Scotland) is arranging to get panel chemists as a body to decline the new terms rather than accept Mr. Charles Roberts's instruction that they must agree, as the Pharmaceutical representatives for England and Wales have done, to go on until June 30, 1916, meanwhile checking for themselves the 0.8d. allowed for establishment charges. Insurance Committees on this side of the Border are also sympathising with chemists, as a glance at our reports will show, and our correspondence columns also reflect something more than discontent. But these are isolated actions; there is no general endeavour to contest the proposed conditions in the only effective way—rejection. The decision

arrived at by the Conference of Local Associations, with the agreement between the Executive Committee and the Insurance Commissioners (England), binds the panel chemists' representatives, the Pharmaceutical Society, to see the matter through. Virtually, it is too late to criticise, and too late to organise panel chemists to withdraw as a body. Many are convinced that the terms of the new Tariff are unprofitable; they find that Sir Robert Morant's statement of the saving on English chemists' bills (125,000*l.*, not 150,000*l.* a year, as erroneously given last week) puts the matter in a nutshell. We published this statement on September 18, so that there was no concealment of the fact so far as we are concerned, and it cannot be said that the *C. & D.* has burked discussion. What we now impress upon panel chemists in England and Wales is that acceptance of the new conditions does not tie them beyond June 30, and if they accept they should think of more than the one consideration—the establishment charge. There is time to take the wider view presented by Mr. Sydney F. Body. He is considering the advisability of getting a general vote of panel chemists on certain questions with a view to ascertaining if there is a sufficient volume of opinion which would help to bring together a national body as a coadjutor to the Executive Committee. The idea is still in embryo, but panel chemists who sympathise with it or want to hear more about it should write to Mr. Body, whose address is 170 Station Road, Westcliff-on-Sea.

The Secretary of an Insurance Committee has informed one of our subscribers that the *C. & D.* is incorrect in suggesting that the Commissioners or the Insurance Committee will undertake the checking of Insurance prescriptions, and he points to the amended regulation on the back of the 1916 agreement forms, adding that "the pricing is still to be done by chemists." What he refers to is the "statement of account," which has to be furnished by the chemist. This is quite a different thing. Our statement in regard to chemists being relieved of the pricing of prescriptions was based upon the Departmental Committee's Report, and information to that effect conveyed to the Conference of Local Associations. This is still the intention of the Commissioners, and is provided for in Article 3 of the draft Medical Benefit Regulations, although not specifically. The statement of account to be submitted by the chemist is quite a different thing from pricing the prescriptions. In Scotland, where the central system of pricing is in force, the statement is made by the chemist on what is known as Form B. We understand that the Commissioners are to make the necessary administrative arrangements in regard to pricing, but it is desirable that assurance should be given on this point, for if panel chemists have to price prescriptions as well as dispense them we anticipate that there will be general and wholesale refusal of the terms, such as that of appliance suppliers who refuse the *O.R.D.*

Malt and Oil.

FORETHOUGHT is a virtue and a moneymaker. Few business people in the world to-day are unaware of this, thousands can look back no further than twelve months and talk of the opportunities they have missed, and reflect that if they had bought *then* they would have been better able to meet competition to-day. Here is a short contrast of prices from the *C. & D.* of the second Saturdays in November:

| | 1914 | 1915 |
|------------------------------------|------------------------------|--|
| Acetic acid (glacial), per ton ... | 42 <i>l.</i> to 45 <i>l.</i> | 110 <i>l.</i> |
| Citric acid, per lb ... | 2 <i>s.</i> 6 <i>d.</i> | 3 <i>s.</i> to 3 <i>s.</i> 1 <i>d.</i> |
| Cod-liver oil, per barrel ... | 71 <i>s.</i> | 350 <i>s.</i> (privately) |
| Ipecacuanha, per lb. ... | 9 <i>s.</i> | 15 <i>s.</i> |
| Linseed, per quarter ... | 47 <i>s.</i> 6 <i>d.</i> | 62 <i>s.</i> |
| Opium, per lb ... | 25 <i>s.</i> | 33 <i>s.</i> |
| Phenacetin, per lb. ... | 6 <i>s.</i> | (last price 52 <i>s.</i>) |

The rise in cod-liver oil is one of the most familiar examples of the effect of war upon the prices of commodities; without entering into detail we may recall that the rise was directly due to fat-famed Germany coming into the market in February and March. Our enemy's buying and the rise in prices became notorious; even the "Daily Mirror" made much of it, and Whitehall looked into the matter. Many far-seeing chemists placed their contracts for cod-liver-oil emulsion and malt and oil long before summer suns began to heat the earth. Verily they are reaping their reward, for to-day prices of everything are at least doubled. Malt is 70*s.* per quarter against 39*s.* a year ago; like all cereals, barley is up (the household loaf is costing 8½*d.*), not because there is any scarcity, but because freights and labour are dearer. This alone accounts for the rise in malt extract, and since cod-liver oil costs five times more to-day than it did a year ago, one cannot buy malt and oil at the old price. These remarks are *à propos* of the suggestion at a District Association meeting that the rise in wholesale prices is due to a "combine" of malt-extract makers. It is true that there has always been an arrangement among maltsters, but that has nothing to do with the present complaint. The fact is that many retailers in London are selling malt and oil at 10½*d.* per lb. bottle, although it costs them that or more, makers having since November last increased their price from 8*s.* to about half a guinea per dozen 1 lb. bottles, although the market value of the ingredients has doubled and quintupled, and bottles cost up to 100 per cent. more. This is a case in which the public should pay, and there would be no hesitation about the matter if selling at store prices had not become almost a fetish with some chemists. We suggest that what they should do now is to raise their prices. Bradford chemists are getting 1*s.* for the pound of extract and 1*s.* 3*d.* for malt and oil. We think that this is a case in which the company chemists may safely take the lead upwards.

The Recruiting Problem.

OUR Pharmaceutical Roll of Honour is visibly lengthening again, and for this we have to thank Lord Derby. Coincidentally the inquiries addressed to us by pharmacists of military age show no diminution in number, although we have stated that we cannot advise in individual cases. How can we? This is a matter which every man must decide for himself; it is the call of King and Country. Although we are fighting other people's battles, we are also determining our own liberty, the freedom of the British Empire, and securing its integrity. New issues have latterly arisen which imperatively require large reserves of men, and the younger generation is responding nobly. So far as that generation of pharmacy is concerned this is especially true; practically every College of Pharmacy in Great Britain is almost at a standstill; the students cannot concentrate on examination-work when the recruiter is about, and many are not attempting to. Meanwhile, the Pharmaceutical Society's Secretary has issued a circular giving the replies to Mr. Glyn-Jones's questions in the House last week (*C. & D.*, November 13, p. 54), and adding the following statement:

In order that the Society may have all the available and necessary data relating to the enlistment of pharmacists, I am instructed by the President to ask you to supply me, if possible, with the following information relating to your area:

1. The number of pharmacists from your area who have joined the Army since the outbreak of war up to November 13:

- (a) for pharmaceutical service;
- (b) for fighting service.

2. The number (if any) of qualified chemists from your area who could be spared for the Army.

This touches the point which particularly concerns those who are left behind. It may be necessary for those who are entrusted with the application of penal provisions to consider how far these may be suspended at present.

Acid and Ester Values.

Description of a New Method for their Determination in Fats, Oils (Fixed and Essential), and Waxes.

By H. F. Slack, Ph.C.

(A communication from the Laboratories of the Standard Tablet and Pill Co., Ltd.)

THE method in constant use for the determination of the ester-content of oils, fats, etc., is a fairly general one, especially for volatile oils, since the publication of a paper on the "Unification of Processes for Commercial Analysis and Valuation of Essential Oils," by Umney and Parry, in the "Perfumery and Essential Oils Record," September 1912, wherein the authors recommended that one hour should be the accepted time for saponification, and that the quantity of alkali employed should be sufficient to leave an excess equal to at least half the amount used up in the chemical combination. As a number of authorities state that saponification is complete in half an hour, and as there does not appear to be a set of standard methods in use which combine the two determinations, acid-value and ester-value, as applied to different classes of material under examination, the author has conducted a series of experiments directed to finding the best conditions for carrying out the estimations in an economical, expeditious, and reliable manner, and suggests:

1. A new method resulting in very quick saponification.
2. A number of modifications of the usual process according to the nature of the saponifiable substance, and which result in a great saving of time.

The former suggestion is tentatively put forward as being a considerable improvement on the operations which are at present customary. The author has used the method with complete success, but other analysts may be able, on preliminary trial, to detect imperfections and discover as yet unnoticed difficulties. As determination of acid and ester values of fixed and essential oils, fats, waxes, resins, etc., is one of the most frequently employed analytical operations, the newer and quicker method should appeal to analysts and become the subject of systematic investigation. In the routine examination of bulk, when the samples drawn therefrom are numerous, the method has been found of the greatest service; also in the analysis of original samples when the state of the market has demanded as quick a result as possible. The conditions and particulars of the author's new method are described first, then reference is made to the now universally employed Koettstorfer process, modified to suit particular requirements.

The new process shortens very greatly the time required for complete saponification, simplifies the manipulation, and minimises the necessary attention during the operation. It depends upon the use of benzyl alcohol as a more suitable solvent and medium for rapid saponification; it possesses the great advantage over ethyl alcohol in dissolving the fat or other substance under examination, so rendering it much more quickly decomposed by the benzyl-alcohol solution of alkali used for saponification. A further obvious advantage, in view of the fact that the rate of saponification is dependent upon the temperature, is the high boiling-point of benzyl alcohol. These two factors result in quick saponification.

The benzyl alcohol employed in the investigations upon which this communication is based was of the usual quality used by perfumers, and had the following characters: Boiling-point, 200° C.; specific gravity, 1.0493 at 15° C.; acid-value, 0.41; and ester-value, 8.85. It will be understood that, as the benzyl alcohol has both small acid and ester values, it may be desirable in some cases to determine these first, and apply a correction. This is necessary where the neutralised alcohol employed to dissolve the oil prior to the titration of the free acids is replaced by benzyl alcohol.

In preparing the solution of potassium hydroxide in benzyl alcohol considerable heat is necessary, and it should not be attempted to prepare a stock solution

stronger than normal. The best and most convenient manner for preparing the solution is to heat strongly the potassium hydroxide with a little of the benzyl alcohol, afterwards pouring the solution so obtained into the remainder of the solvent cold. It was found that complete saponification results after boiling for five minutes, no shaking or attention being required. The following is a description of the process as used for oil of lavender:

About 5 grams of the oil is weighed into a 125 c.c. carbon-dioxide flask, with the addition of a little phenolphthalein solution. After warming to about 80° C. the acidity is determined by titration against decinormal alcoholic potash solution. 20 c.c. of approximately normal solution of potash in benzyl alcohol is added, and the whole boiled under a reflux air-condenser for five minutes over a direct flame.

The solution is allowed to cool to about 100° C., and the excess of potash found by titration against normal solution of hydrochloric acid with very thorough agitation during the addition of the volumetric solution, and after the addition of a suitable volume of neutralised methylated spirit.

On trying solutions of different strengths of potassium hydroxide in benzyl alcohol it appeared that but little, if any, advantage was gained by using a normal instead of a seminormal solution. Saponification is complete almost as soon as the temperature reaches the boiling-point of benzyl alcohol, as the following figures illustrate:

Ester Percentage.

| | Using Seminormal Solution | Using Normal Solution |
|--|---------------------------|-----------------------|
| Contents of flask heated just to the boiling-point ... | 39.28 | 39.94 |
| After five minutes' boiling ... | — | 41.94 |

Since the employment of seminormal solution does not necessitate the use of so much as 5 grams of the oil, it is to be recommended in cases where the sample is small in amount.

This method further simplifies the operations in connection with saponification in not requiring the addition of carbon dioxide-free distilled water before titrating the unused potash after boiling. After this titration it was noticed that the colour of the phenolphthalein rapidly returns, but accurate results are obtained by taking the burette reading at the first moment of complete disappearance of the colour.

In adapting this process operators are recommended to check their results by the Koettstorfer method until they have established for themselves standard methods for different classes of materials and sets of conditions. It is well known that beeswax presents difficulties when examined by the old method and requires prolonged boiling for complete saponification, and it is for this substance that the benzyl-alcohol method is particularly recommended.

The author has also carried out experimental work with a view to standardising the usual Koettstorfer process in order that it may be applied to such widely different substances chemically as oil of lavender and fats of high acid-value like commercial palm oil. In this method it was found possible to introduce numerous improvements, with the result that the requisite time for saponification was brought to a minimum consistent with accuracy. The Koettstorfer process is described in Allen's "Commercial Organic Analysis," Vol. IV., as follows:

Saponification of from 2 to 5 grams of the oil (after a preliminary titration with seminormal solution of potassium hydroxide in the case of oils containing free acids) under a reflux condenser for half an hour by boiling with 15 to 25 c.c. of alcoholic solution of potassium hydroxide of approximately seminormal strength, and titration of the excess of alkali with seminormal solution of sulphuric acid.

Quite as general, perhaps, is the titration of the free acids in the oil against decinormal aqueous alkali and final titration of the excess of potash used for the saponification against seminormal solution of hydrochloric acid. The use of aqueous alkali in the acid-value determination is not desirable in view of the fact that the introduction of water, particularly in cases of substances containing much free acid, considerably lengthens the time required for complete saponification in the subsequent boiling with alcoholic solution of potassium hydroxide. In the case of substances of low acid-value, it is usually

immateral, however, whether aqueous or alcoholic alkali be used for titration. Except for the fact that saponification is not as complete after half an hour's boiling as after one hour, as shown by the following figures, and that it is preferable to use decinormal alcoholic solution or alkali instead of the seminormal solution, the old method, although only roughly described in works of reference, is fairly satisfactory when intelligently applied.

The following are proposed as modifications of the estimation:

Method A. Using Oil of Lavender.

2.5 grams of the oil is dissolved in 15 c.c. of neutralised alcohol and the acid-value found by titration against decinormal alcoholic solution of potassium hydroxide. 20 c.c. seminormal alcoholic solution of potassium hydroxide is added and the mixture boiled for one hour. 40 c.c. carbon dioxide-free distilled water is now added and the excess of alkali titrated with seminormal solution of hydrochloric acid.

Method B.

The period of boiling (one hour) may be reduced in the case of essential oils to half an hour by taking 5 grams of the oil along with 25 c.c. neutralised alcohol and 20 c.c. normal alcoholic solution of potassium hydroxide, and it would appear, from the point of view of accuracy, that this modification is to be recommended.

Using oil of lavender the following figures were obtained:

| Particulars of Method | | Ester Percentage |
|-----------------------|------------|------------------|
| Method A (above). | | |
| Boiled for | 5 minutes. | 33.35 |
| " " | 15 " | 38.89 |
| " " | 30 " | 40.67 |
| " " | 60 " | 41.28 |
| Method B (above). | | |
| Boiled for | 5 minutes. | 37.35 |
| " " | 15 " | 39.92 |
| " " | 30 " | 41.22 |

No advantage was obtained, or any further reduction of the time of boiling found possible, by diminishing the volume of alcohol above recommended for dissolving the oil prior to the titration of the free acids. The following modifications of the Koettstorfer method were found desirable, and for the materials treated, viz. tallows, cocoanut and palm oils, are stated the most convenient weights to take, volumes of solutions to be used, and such other particulars as will enable operators to adopt standard methods for substances of various acid and ester values.

Method I. for Tallows.

Acid-value.—Take 3 grams or slightly less of fat in a carbon-dioxide flask, add 20 c.c. of neutralised alcohol, boil on water-bath, and titrate against decinormal alcoholic solution of sodium hydroxide.

Ester-value.—After the estimation of the free acids, add 20 c.c. normal alcoholic solution of potassium hydroxide and boil for a quarter of an hour on water-bath, along with a "blank" experiment in which the seminormal solution of potash is alone employed, with constant agitation and titrate against normal solution of hydrochloric acid.

$$\text{Acid-value} = \text{c.c. N/10 alcoholic alkali} \times 0.0056 \times \frac{1000}{\text{quantity of fat in grams}}$$

$$\text{Ester-value} = \text{c.c. N/1 hydrochloric acid (required for "blank")}$$

$$= \text{c.c. N/1 hydrochloric acid} \times 0.056 \times \frac{1000}{\text{quantity of fat in grams}}$$

(for neutralising excess in the estimation)

| | Weight to be Taken | Volume of Neutralised Alcohol |
|--|--------------------|-------------------------------|
| Method II., for coconut oils ... | 2 to 2.5 grams | 15 c.c. |
| Method III., for palm oils ... (bleached and unbleached) | 3 to 3.5 grams | 25 c.c. |

The conditions for Methods II. and III. are essentially those employed in the process above described for tallows. It will be noticed in the case of the above classes of fats that the quantities and strengths recommended render it possible for saponification to be completed in quarter of an hour, and this is accomplished by:

1. Limiting the volume of neutralised alcohol for the acid-value determination.

2. Employing alcoholic alkali for titration of the free acids.

3. Using normal alcoholic solution of alkali for the saponification.

4. Constant agitation during saponification in order to break up the globules of fat which otherwise would be attacked only slowly, according to their size.

As applied to the valuation of essential oils, further alteration of the process is necessary according to circumstances, particularly in cases where a determination of the volatile acids is to follow, as in the examination of oils of lavender, bergamot, and other oils of similar chemical nature. This matter was treated fully in a paper on "The Determination of Volatile Acids in Essential Oils," published in the "Perfumery and Essential Oils Record" for April 1914, to which reference may be made for full particulars.

Christmas Trade.

A. short series of articles on the present opportunity for retail chemists to increase the normal takings by special Christmas sales.

I.—TRY TO GET THE BUSINESS.

THE question that every retail chemist and druggist should be asking himself to-day is, "Have I put forward every effort to obtain my share of the Christmas trade?"

It is true that people may not spend as much as usual in gifts this year; but the same idea prevailed last year, and it was negated by facts. Now, as then, there is wealth in Great Britain, there is good will, there is the wish to make others happy—this existing to-day to an extent which has perhaps never been evinced before, for now the heart of the nation is stirred. It is in the province of the chemists and druggists to make these impulses take a practical shape, for almost every chemist keeps articles of very real convenience and value in this connection. The first task is to make him realise this, and the next to make him act on it.

A chemist's window is the index to his establishment; therefore it is important that this should be dressed in accordance with the season, yet it must contain the things that show he is alive to the present very special conditions and requirements. Assuming, therefore, that the window is all that it should be, the next item to be attended to is the personal appeal. How should this be most tactfully and successfully made? A little consideration shows that this year the first persons who will receive gifts are those who are defending our country by land and sea. Chemists keep a very large proportion of articles which should go into every package that is sent to the Front. I name a few: trench-powder, foot-powder, shaving-mirrors, safety-razors, pens, scissors, knives, meat-tablets, tea-tablets, tooth-pastes, shaving-sticks, brushes, combs, peppermint-drops, brushes, etc.

Ladies, children, friends—the chemist keeps gifts for them as well, such as perfumery, manicure-sets, atomisers, and sachets. All these things should be brought to the public notice by means of the best advertising obtainable, *i.e.*, dainty booklets and suggestive folders telling of the articles you keep and calling attention to them. The local paper might in some cases prove a good help, but the personal appeal is the better if only one method is used. The folder or booklet should tell, in the first place, of articles suitable for gifts for those in the Army or Navy; in the second, suggest presents appropriate for ladies, children or others; and a third appeal, in the shape of a card, might go out just a few days before Christmas as a reminder. Of course, if the advertising is ordinary, the results will be disappointing. Something that catches the eye and convinces the mind is necessary. Too much emphasis cannot be put on this point.

The department stores make a huge number of sales at this season of exactly the same articles as are kept by chemists and druggists. Why is this? Nine times out of ten it is because these goods are conspicuously and attractively displayed; also because they are properly advertised. You who read this should reach out for some of this trade. Besides the direct profit derived, there is always the benefit of bringing customers to your pharmacy. This special Christmas trade belongs to you, but what you do not seek for vigorously, persistently, you are not apt to find.

F. A. DEGEN, F.I.S.A.C.

A Day in Lagos.

WE reported in our issue of October 9 that Mr. R. C. Wren, F.L.S., of Potter & Clarke, Ltd., London, E., arrived at Lagos, Nigeria, on September 11, by s.s. *Karina*, and mentioned last week that he has come home again.



MR. WREN AND MR. H. A. CAULCRICK.

We have had an interesting chat with him. Lagos was merely the centre for Mr. Wren's excursions in Nigeria: he visited various places, such as Ebute Metta, some three miles distant; Ibadan, where the Government plantations are; and on the way home called at Sierra Leone, which is about a thousand miles north of Lagos. The Gold Coast, as this region was once exclusively called, takes its wealth from palm oil and other vegetable products. Lagos oil still ranks as the best produced, and during the past quarter of a century the town's trade in this has developed enormously, and with it the well-being of the inhabitants and the trade of the place. The white population of the town includes chiefly Government officials, leading men in business and shipping houses, and for these there are several English doctors. At the Colonial Hospital the dispenser is a Scots lady. Three drug-stores are in the town, owned by native gentlemen, Mr. Caulcrick's being the largest (see also our Summer Issue, p. 146). When we began to speak about them and kindred things to Mr. Wren it was the kindred things that came uppermost, as they reflected the medical life of the place. One morning Mr. Wren motored to the native market, in which a portion is set apart for the sale of native medicines. Throughout Nigeria many herbs and vegetable products, as well as some of animal and mineral origin, are regarded as beneficial in the cure of disease. Generally they are sold on the prescription of a native herb-doctor. Most of the seed-pods, leaves, and barks profusely displayed in this market were unknown to Mr. Wren, but among them he noticed native semas (species of *Cassia*), bonduc-nuts, jequirity-seeds, castor-oil seeds, and kola-nuts. The larger number of the displayed remedies were of animal origin. Baskets of dried chameleons, and here and there a live one as green as the leaves he was feeding on; dried mice and rats skewered on long canes; snakes' heads and birds' heads on strings; live snails, as big as your fist, crawling in straw baskets; electric catfish alive in large calabashes; bags and baskets of cuttlefish-bone; small calabashes and goats' horns for use as medicine-bottles—these and a number of other curious things made a remarkable display. Perhaps not the least noteworthy were the native women who presided over these shops or stalls.

"I put through my native friend," remarked Mr. Wren, "some questions to the dusky ladies who were in attendance as to the diseases which the drugs were used for, but found them either very ignorant or very secretive. According to the reports of several friends I understood that it would be very difficult to ascertain the uses of the medicaments displayed, and that the secrets of the trade are handed down from father to son and constitute something of a Ju-ju or fetish knowledge investing the owner with a certain reputation of the possession of supernatural powers." In the afternoon Mr. Wren had the opportunity of hearing more about these native remedies from men who were less superstitious. Through Mr. Caulcrick he had been asked to receive a deputation of

the Society of Native Medical Botany, which was arranged for 4.30 P.M. When that time arrived five native gentlemen were introduced to Mr. Wren and in a most complimentary manner expressed their gratification for the honour. "For my part," said Mr. Wren to us, "I thought it an excellent opportunity of gaining some information of the uses of native drugs, and a more interesting conversation I have seldom been privileged to have."

The deputation was introduced by a St. Thomas's Hospital man, Dr. Oguntola Sapara, medical officer of the West African Medical Staff, and one of the best type of native doctors in West Africa who have received their medical education in England. He holds the Scotch triple qualification, and is exceedingly intelligent and broad-minded. Continuing, Mr. Wren said: "Mr. S. P. D. Wilkey, the Chairman of the Society, made an excellent speech in good English. Mr. E. J. Leigh, another member of the deputation, took great delight in showing me his diploma certifying that he had attended the Westminster College of Pharmacy in 1902. These men, though possessing no Government qualification, had evidently acquired considerable knowledge of herbs and their uses, and they wanted to obtain more. They expressed a desire to know what is done in England with regard to the use of botanic drugs and to be put in correspondence with any Association of a kindred character to themselves. They were also anxious to have advice as to the best books to read. On these matters I gave them all the information at my disposal and proceeded to question them on several points. I described my visit to the native herb-market, and asked if they use the animal products much. The reply was a decided affirmative; then I learnt that the electric catfish is made into a soup with certain herbs to hasten quickening. The general principle followed is that the animal dead is considered to have some of the attributes of the living being. Prolific animals, such as the manatee, are used as aphrodisiacs and so on. Poisonous snakes are used as antidotes to certain diseases, dried skulls as nervines, chameleons combined with metals and herbs as a fetish or Ju-ju and for coughs. The jequirity-seed decorticated is made into a paste with salt for an application to boils, and kola for dysentery. Dr. Sapara told me that he uses kola combined with bismuth and salol. He finds that the patient can with this medicine go a considerable time without food, and thereby the stomach obtain its needed rest." Another variety of kola, called the "bitter kola" (*Garcinia Kola*), is also used in bronchitis and throat-affections. "I hope to have this tried in England before long, as its virtues are very highly



LAGOS HERB-MARKET.

spoken of. I questioned whether animal products such as they use can do much good, but they assured me that they had found them extremely beneficial, and agreed that it was only by experimental application that one can judge. Does not the English physician use animal serums of all sorts, and does he not find out their value by experiment?"

Pharmaceutical Society of Ireland.

Council-meeting.

THE Council met at 67 Lower Mount Street, Dublin, on Tuesday, November 9, Mr. James Tate (President) in the chair. There were present: Messrs. Thomas Batt, G. D. Beggs (Hon. Treasurer), R. Blair, Joseph H. Bowden, J. E. Connor, Wm. J. Hardy, W. Jameson, James Michie (Vice-President), Thos. Moffitt, John Smith, D. M. Watson, A. Owen Wells, W. F. Wells, P. N. White, Dr. J. A. Walsh, and Dr. Whitla.

Mr. MICHIE thanked the members of the Council for having at the previous meeting elected him Vice-President.

THE ASSISTANTS' EXAMINATION.

The following resolution from the annual meeting was submitted:

"It is hereby recommended at the 1915 annual meeting of the Pharmaceutical Society that the Council consider the question of altering the conditions attaching to the Assistants' examination in order to induce a greater number of candidates to enter for it."

Mr. WATSON said they would all like to increase the number of qualified assistants, but he was of opinion that two years' apprenticeship would be entirely too short. He did not see how they could give a diploma to a man to act in the absence of the proprietor under three years' service.

Mr. HARDY said he thought two years would be enough.

Mr. SMITH said they should make it part and parcel of the Licence examination.

Mr. W. F. WELLS: Hitherto we have held out for four years. I think we should be very careful as to whom we are to give the qualification to act as assistants.

Eventually the matter was referred to the Law Committee.

CORRESPONDENCE.

The Secretary read a letter from the Privy Council, Dublin Castle, accompanying a copy of a report from Sir John W. Moore on the examinations. It was referred to the Law Committee.

Dr. James S. Ashe, M.P.S.I., wrote thanking the Council for their consideration and kindness while he examined in materia medica and botany, and expressed a wish to become a life member of the Society. The letter was ordered to be entered on the minutes.

Thanks were accorded to donors of books to the library.

ELECTIONS.

On the motion of Mr. BEGGS, seconded by Mr. A. OWEN WELLS, the following were elected members of the Society: Mr. Herbert Tenison Beggs, Ph.C., Dalkey; Mr. John Flanagan, Ph.C., Bullevant; and Mr. Wm. McAuliffe, Ph.C., Strokestown.

Mr. BEGGS proposed, and Mr. MOFFITT seconded, the election of Mr. Samuel C. Cope, R.D., Castledermot, co. Kildare, as associate druggist.

EXAMINATIONS.

Reports were received from the examiners on the Preliminary, Registered Druggist, Pharmaceutical Licence, and Pharmaceutical Assistant examinations. Three candidates presented themselves at the Druggist examination, and the only one who passed was a lady. For the Licence examination seventeen candidates were presented; seven passed and nine were rejected. Three passed in honours, one got gold-medal marks, another got silver-medal marks. For the Pharmaceutical Assistant examination there was but one candidate, and he passed.

On the motion of Dr. WALSH, seconded by Mr. SMITH, Mr. William Johnston, B.A., was re-elected examiner for the Preliminary examination for the ensuing twelve months.

The licences for those who passed the examination last month (see *C. & D.*, October 23, p. 36) were sealed.

For the post of examiner in materia medica and botany, vacated by Dr. Ashe, there were five candidates—viz., Dr. Alfred J. Barnes, Dublin; Mr. J. Carroll Culbert, Belfast; Mr. J. W. Harvey, Cork; Mr. Michael O'Donnell, Dublin; and Dr. T. Mather Thompson, Dublin. Mr. Harvey received a majority of votes, and on the motion of Mr. BEAIR, seconded by Mr. MOFFITT, he was appointed.

On the motion of Mr. CONNOR, seconded by Dr. WALSH, Mr. George Brown, M.P.S.I., Wexford Street, Dublin, was elected as examiner for the Registered Druggist examination, in the room of Mr. James Dundee, whose term of office had expired. Mr. Brown will examine in Belfast and Dublin.

There were four applicants for the Assistants to Pharmaceutical Chemists examinership in room of Mr. Victor E. Hanna, M.P.S.I.—viz., Mr. G. Brown, Dublin; Mr. I. J. Eppel, M.P.S.I., Dublin; Mr. John McElhinney, Donnybrook, co. Dublin; and Mr. Henry James Sumner, M.P.S.I., Dublin. On the motion of Mr. W. F. WELLS, seconded by Mr. BEGGS, Mr. Sumner was appointed.

Westminster Wisdom.

By the "C. & D." Parliamentary Representative.

INCOME-TAX AND CO-OPERATIVE SOCIETIES.

The Council of the Association of Chambers of Commerce has decided to make further representations to the Chancellor of the Exchequer on this subject. In the meantime, Mr. Montagu, Financial Secretary to the Treasury, has informed Sir J. Rees that if income-tax were assessed on societies as such, instead of on the liable members, it would be necessary to repay much the greater part of the sum collected to the very numerous members who are exempt.

HOSPITAL SPIRITS.

Our Parliamentary correspondent learns that there is considerable doubt as to whether the special vote in Supply, recently promised by the Chancellor of the Exchequer, to give hospitals relief in regard to duty on spirits will be introduced until next Session. The Finance Bill is not yet disposed of, and, in addition, other matters are likely to engage the attention of Parliament, including the extension of its existence under the Parliament Act until the adjournment for Christmas.

EXPORT OF SULPHATE OF SODA.

The President of the Board of Trade informed Sir E. Cornwall, in the House of Commons on Monday, that there is no prohibition against the export of sulphate of soda, but the export of carbonate of soda is prohibited to Holland, except under licence. Representations against the prohibition have been made by Dutch glass-manufacturers. It is not proposed to withdraw the prohibition, but licences for export to Holland are being issued freely, provided that users of the soda are not suspect persons, and subject, of course, to the Netherlands Oversea Trust accepting consignment.

LORD LANSDOWNE'S COMMITTEE ON RECRUITING.

No steps (our Parliamentary correspondent is informed) have yet been taken towards the constitution of the Appeal Tribunal which, under Lord Lansdowne's Committee, which is advising the Government on matters relating to the National Register, is to be set up to hear cases of exemption which are in dispute between employers and the local Tribunals. A variety of trades have already been scheduled, the workers in which, being engaged upon war work, must not be recruited for the Army, and lists of these starred men have been published. It is considered probable that the Committee, which is now meeting at regular intervals, will continue in existence until long after the termination of the war, when a number of cognate questions arising out of the demobilisation of the Army may be expected to claim attention.

THE SANATOGEN Co.

In the House of Commons on Tuesday, Mr. J. G. Butcher, K.C., M.P., asked the Home Secretary whether his attention has been called to the case of A. Wulffing & Co., also trading as the Sanatozen Co., at 12 Chenies Street, London, W.C.; whether the sole member of this firm is Johann A. von Wulffing, a German alien enemy resident in Berlin; whether the London manager of this business is one Max Muller, a German alien enemy of military age resident in England; and whether, in view of the fact that there are British subjects capable of managing this business if required, there is any adequate reason why Max Muller should not be interned.—Sir John Simon replied that the London business of the Sanatozen Co. is now independently carried on in the interests of this country under a British supervisor appointed by the Board of Trade, and any profits are paid over to the Public Trustee. The case of the individual referred to was carefully considered by the Advisory Committee, who, in view of the special circumstances, recommended that he should be exempted from internment on condition that a bond for 1,000*l.* for his good behaviour was entered into by two British subjects.

Mr. Butcher: Are there not British subjects just as capable of carrying on this business as this German alien enemy?—Sir J. Simon: I apprehend that he has special knowledge of the processes of manufacture.

Mr. Butcher: Will the right hon. gentleman ascertain whether there are not British subjects perfectly well able to manage this business?—Sir J. Simon: I have already made some inquiries, and will make more. I can assure the hon. and learned member that if that is so there would be no reason for keeping that gentleman uninterred.

Mr. R. Gwynne: Who will get any benefit from the profits when the war is over?—Sir J. Simon: I think that, as the Prime Minister has said, is a matter the contemplation of which had better be left to the end of the war.

Colonel Alan Sykes: Is Sanatogen a necessity for the country? Are there not British products which could take its place equally well?—The Home Secretary: I believe it depends on whether we can manage to preserve good nerve. (Laughter.)

Mr. Butcher then addressed a somewhat similar question to the President of the Board of Trade, adding the further interrogatories: Whether this firm has received a licence to trade in this country, and, if so, for what reason and on what terms; and whether he will take steps under the Trading with the Enemy Acts to appoint a controller of this business, with the powers of a receiver and manager, for the purpose of winding up the business and selling it to a British company or British subjects.—Mr. Runciman replied that the proprietor and manager of A. Wulging & Co. are as stated above. No licence to trade has been granted to the firm, and having regard to the provisions of paragraph 6 of the Trading with the Enemy Proclamation of September 9 no such licence would appear to be necessary to enable the branch of the business in this country to be carried on. In October last year he appointed an inspector of the business, and subsequently he appointed a supervisor in accordance with the Trading with the Enemy Acts, in order to ensure that no trading with the enemy takes place, and that the profits are paid over to the Public Trustee as custodian of enemy property. As at present advised, he did not think it necessary to apply to the Court to appoint a controller.

Associations' Winter Session.

Berkshire.—A meeting of the Berkshire County Chemists' Association was held on November 14 at 2 Abbots Walk, Reading, Mr. Metcalf in the chair. Nine other members were present, and Mr. M. C. Rock (Hon. Secretary). The meeting was called to decide the question of taking service under the new Insurance Tariff, and after considerable debate it was considered that were action taken by chemists in the nature of a strike it would probably be misunderstood by the general public. It was therefore resolved to continue service, whilst protesting against the inadequate and unjust remuneration offered for the services rendered.

Birkenhead.—A special meeting of the Birkenhead, Wirral, and Wallasey Association of Pharmacists was held at the Woodside Hotel, Birkenhead, on November 11. There was a good attendance. The only pharmacist present who was not a member of the P.A.T.A. joined during the meeting. Dr. A. J. Barnes, Dublin, delivered an interesting address upon the Proprietary Articles Trade Association. It was stated that pharmacists could not hope for better terms in regard to profits on patents, because of the expense of advertising. It was also pointed out that the P.A.T.A. holds a unique position between the manufacturer, the wholesaler, and the retailer. It is very delicately adjusted, and should not be tampered with by outside influences. This puts very briefly an able but lengthy address, in which Dr. Barnes proved to be a firm believer in the P.A.T.A., an advocate for its support, and a prover of its solid accomplishments for the drug-trade. In the discussion which followed, Mr. J. G. Thompson (Boots, Ltd.) complained of various cases locally where P.A.T.A. goods are being sold below minimum prices. Dr. A. J. Barnes stated that Boots, Ltd., have always been most loyal in adhering to P.A.T.A. prices, and that it is a matter of regret that such reports should be made. Mr. J. A. Stelfox suggested that chemists should unite and refuse to stock certain patents that are sold without profit. Mr. A. J. Stones thought that a combination of all the patent-medicine licence holders in any district should be able to dictate retail prices for that district, and take steps similar to that of the Wallasey Grocers' Association in reference to the minimum profits of bovril. A vote of thanks was passed to Dr. A. J. Barnes.

Birmingham.—A meeting of the Council of the Birmingham Pharmaceutical Association was held on November 15 when the following officers were elected for the coming session: *President*, Mr. E. W. Mann, B.Sc., F.I.C.; *Vice-*

Presidents, Messrs. W. Izon and H. O. Lloyd; *Hon. Secretary*, Mr. F. Smith; *Treasurer*, Mr. Jeffrey Poole; *Librarian*, Mr. F. H. Alcock, F.I.C.; *Auditors*, Messrs. W. M. Bramley and W. E. Boyle. It was decided not to hold the usual social meetings this session. The incidence of the present recruiting campaign upon pharmacy was considered, and a letter will be sent out asking that information of the enlistment of pharmacists from the Birmingham district be sent to the Secretary. It is also intended to circularise members respecting the retail sale of magnesia, magnesium carbonate, and other drugs.

Bournemouth.—A meeting of the Bournemouth Pharmaceutical Association was held at the Gervis Hall on November 12, the President (Mr. T. Hirst) in the chair. The subject for discussion was the Proprietary Articles Trade Association, which was represented by Mr. John Keall, Mr. R. Feaver Clarke, and Mr. D. P. MacDonald of the staff. In introducing the speakers, the President said that from its early days he had realised the benefit of the Association's scheme. Every pharmacist should be a member, not only of the P.A.T.A., but also of the Chemists' Defence Association. Mr. Keall then reviewed the work of the P.A.T.A. from the commencement twenty years ago. He mentioned that in the re-arrangement of prices consequent on the new stamp-duties, many manufacturers had taken the opportunity of guaranteeing better profits than formerly. Mr. Keall also stated that he is in favour of everything being sold at face value. Messrs. Bilson, Bingham, Rose, Martin, Feaver Clarke, and Jones took part in the discussion which followed, and eventually a resolution was carried unanimously heartily supporting the P.A.T.A.

Bradford.—A largely attended and lengthy meeting of the Bradford Pharmacists' Association was held at the Talbot Hotel on November 16, the President (Mr. R. T. Silson) in the chair. Mr. A. Thorpe, Killinghall Road, was elected a member of the Association. A discussion took place upon the subject of *Enlistment of Pharmacists* and their assistants. The matter arose out of a circular letter from the Pharmaceutical Society drawing attention to the unsatisfactory results of efforts to arrive at an understanding which would safeguard the civilian population against a shortage of pharmaceutical services, and urging that every effort should be made to direct what enlistments did occur into the Royal Army Medical Corps. Mr. Marmaduke Firth mentioned that recruiting for that unit is now practically stopped. Mr. Pycroft reported having introduced the point at a meeting of the Bradford Chamber of Trade the previous evening, and the Secretary of the Chamber (Mr. F. Pickering), who is a member of the Recruiting Committee and of the local Appeals Tribunal, was unable to give any assurance of exemption for pharmacists. General opinion was expressed that serious efforts should be made to point out the position of the profession to the tribunal, though it was recognised that no appeals could be made to that body except in the case of men already attested, and that there would be no hope of obtaining special consideration for assistants in the trade who are not qualified chemists. Apart from these considerations it was felt that chemists had a good case for asking for exemption or being put into a late class by the tribunal, which is probably as far as the tribunal's power goes. It was decided that the Council should put the case of chemists before the Appeals Tribunal so that proper allowance should be made for the urgency of the profession's needs. A letter was read from the Glasgow Association asking support in writing to *proprietary articles* firms whose goods yield unremunerative profit for chemists, and also suggesting that wholesalers should adopt cardboard boxes with wood linings as packing for goods. No action was taken. It was decided to abandon the annual dinner. It was decided to contribute 10% to the Bradford Lord Mayor's War Fund. The President and Mr. Burdett then reported on the Local Associations Conference, the chief point to which attention was directed being the establishment charge. Mr. Marmaduke Firth said he did not see how the figures needed for raising this amount could be provided. He kept his books very carefully, but he could not see how he or any other chemist could differentiate between the costs and receipts of Insurance business, drug-business, and other business. It was resolved that application be made to the Pharmaceutical Society for forms detailing the information required. Further discussion took place regarding "Reptomist" prescriptions, and it was decided that the Pharmaceutical Committee should point out to the Insurance Committee the difficulty and trouble which will probably arise both to chemists and checkers if the continuance of the "Reptomist" is permitted. A vote on the question whether or not the members should remain on the panel under the new conditions resulted in favour of remaining.

Cardiff.—A whist-drive to entertain wounded soldiers was held under the auspices of the Cardiff Pharmacists' Association at the Dorothy Café, High Street, on November 10, when about fifty-seven ladies and gentlemen were present. The ladies' prizes were won by Miss Griffiths, Mrs. Evans, and Miss Jabez Jones. There were several prizes for the soldiers, and each soldier was presented with an electroplated shaving-mirror, which could also be used as bullet-proof shield over the heart. The sergeant in charge thanked the pharmacists for the enjoyable afternoon. After tea the soldiers were conveyed back by motor-car to the Whitchurch Hospital.

Chesterfield.—A meeting of the Chesterfield Pharmacists' Association was held on November 9 at the Queen's Park Hotel, Mr. F. J. Houston in the chair. There were six other members present and Mr. J. H. Toplis (Hon. Secretary). *Insurance Dispensing* conditions for 1916 were discussed at some length, and it was decided to call another meeting further to consider the matter as soon as the new Tariff is to hand. *Earlier Closing* was next gone into, with the result that it was agreed that shops will close at 7.30 every night, except Saturday, when 10 P.M. was fixed. It was also agreed that the Wednesday evening and Sunday evening duty, which is taken by the chemists in rotation, should be from 6.30 to 7.30, instead of 6 till 8 as previously. The retail prices of drugs affected by the war were revised.

Eastbourne.—A meeting of the Eastbourne Pharmacists' Association was held at 2A Terminus Buildings on November 7, Mr. G. A. Harmer (President) in the chair. There were also present eight members and Mr. D. Marchant (Hon. Secretary). It was a postponed annual meeting, but on account of the urgency and importance of Insurance business it was agreed to let the annual reports stand over. Mr. G. A. Harmer was re-elected President, and Mr. D. Marchant was re-elected Hon. Secretary and Hon. Treasurer for the session. A discussion then took place on the 1916 Tariff. The principles were practically agreed upon, but the establishment remuneration of 0.8*d.* is so inadequate that the Secretary was instructed to write to the Insurance Committee and inform them that the pharmacists are unable to accept that amount, and could not consider anything below 1.5*d.* for establishment charge. They also asked the following conditions to be reinstated: Oxygen in 20-ft. cylinders at 4½*d.* per foot. After-hours fees.—3*d.* per call: Ordinary days, 8.30 P.M. to 11 P.M.; Wednesdays, 1 P.M. to 7.30 P.M., 8.30 P.M. to 11 P.M.; Sundays and Bank Holidays, 8 A.M. to 12.30 P.M., 1.30 P.M. to 8 P.M., 9 P.M. to 11 P.M.; 6*d.* per call all days from 11 P.M. to 8 A.M., and that "aqua" in the Tariff should mean aqua dest.

Edinburgh.—The opening meeting of the session of the Edinburgh District Chemists' Trade Association was held at 36 York Place, Edinburgh, on November 12. Mr. Adam Duncan (President) in the chair. In the course of his address the Chairman referred to the sacrifices which young pharmacists have made during the war and said he hoped that a tablet would be erected somewhere to perpetuate these efforts. Regarding the enhanced prices of certain drugs, he said experience shows that chemicals and drugs are peculiarly sensitive to the influence of war. Too many articles rise to a fictitious value, and that value is maintained even after sixteen months of war. He knew there are many influences at work which make the subject a highly complex one, but it is to be hoped that manufacturers will undertake the production of many of the articles which have risen to such a high figure. With regard to contracts under the National Insurance Act, he thought chemists would be wise to restrain themselves from forming drastic conclusions on any question that may arise, for no one could say what the future will be. A vote of thanks was given to the President for his address. Mr. Peter Boa then referred to the work of the Pharmaceutical Committee, the machinery of which has worked very satisfactorily since the establishment of a Checking Bureau, but he added the work of the Bureau is much in arrears. Mr. Muir, the next speaker, mentioned some anomalies in pricing. Hitherto it had been the custom to price capsules not on the Tariff but by adding one-third to the cost in the wholesale price-list locally agreed upon, and also the dispensing-fee allowed by the Tariff scale. The Central Checking Bureau adopted the method of allowing the price for material contained in the capsule fixed on cost and the dispensing-fee. But nothing is allowed for the capsules. This gives a much lower price, and one which is unremunerative. The view of the Pharmaceutical Committee is that the former method, which has been followed for two years, is correct according to the terms of the chemists' agreement. The Commissioners decline to intervene except

in the case of a dispute between the Insurance Committee and the Pharmaceutical Committee. The latter has therefore asked the Insurance Committee to give a decision on the point. Mr. J. R. Hill said this point has come up from several districts, and as representing panel chemists he had had to explain at meetings of the Drug Accounts Committee the two methods. The duty of the Bureau is to audit chemists' accounts and price prescriptions in accordance with its interpretation of the chemists' agreement. If this is correctly done and the result yields an unremunerative price, the remedy must be some new understanding as to the interpretation of the agreement or some modification of its terms. The Bureau method of pricing regards the capsule as a container, and the Tariff makes no allowance for containers other than glass bottles. The solution of the difficulty might be to regard the capsule as an exception in the category of containers, and allow, say, 1*d.* per dozen for capsules, the pricing otherwise to be according to the method adopted by the Bureau.

Edinburgh Assistants.—The opening meeting of the session of the Edinburgh Chemists', Assistants', and Apprentices' Association was held at 36 York Place, Edinburgh, on November 10, Mr. A. A. W. Cuthbertson, Ph.C. (Vice-President), in the chair. The opening address was given on *War: Its Effect on Pharmacy*, by Mr. J. Adamson (President). After a few crisp remarks on the origin and uselessness of the war, and on the loyal manner in which pharmacists have answered the call, he appealed for a leader who will lift pharmacy to its proper level and force due recognition and compensation for its services to the community. The Insurance Act, he said, is a beneficent measure; it is the realisation of the hopes of progressive men. The nation is to care for its sick and those who fall by the way in a new and better way. But the fate of the pharmacist, the future of pharmacy as an honourable craft, the whole practice of medicine by Insurance practitioners, and the medical care and good health of the insured community hang in the balance. A wrong step, a false move, and things may work out to our detriment and that of the other interests involved. One of the first effects of the war is a demand for money, which has necessitated the doubling of the patent-medicine tax and the reduction of the income-tax limit. Regarding the demand for more profit on proprietary medicines, some manufacturers have taken the opportunity of increasing the vendor's profit. He favoured Mr. Saunders' scheme of fixing the face-value as the minimum retail price. Mr. Adamson also mentioned the practical difficulties involved in conscription, and then dealt with the effect of the war on the supply of fine chemicals. He considered that the Government must help the manufacturers by protecting home industries, and so overcome the fear of foreign competition after the war. A vote of thanks was given to the President. Mr. David Gilmour then presented the Association prizes to the respective competitors as follows: The Ewing Pharmacy Prize (value 1*l.* 1*s.*), consisting of Bentham and Hooker's "Flora of the British Isles" and Walker's "Inorganic Chemistry," to George Eadie; the William Aitken Prize (value 10*s.* 6*d.*), consisting of Newth's "Qualitative and Quantitative Analysis" and Senter's "Inorganic Chemistry," to Percy MacGregor; the Cumming Prize (value 1*l.* 1*s.*), consisting of Cunningham's "Manual of Practical Anatomy," to Second-Lieutenant R. Morpeth; the Fraser Prize (value 1*l.* 1*s.*) to Percy MacGregor; the MacEwan Prizes, (1) "Pharmaceutical Formulas," to Percy MacGregor, and (2) "Art of Dispensing," to George Eadie. Mr. Gilmour expressed the indebtedness of the Association to the donors. Mr. J. Tait was appointed Treasurer in room of Mr. David Murray, who has obtained an appointment in Liverpool.

Huddersfield.—A meeting of the Huddersfield Chemists' Association was held on November 16, under the presidency of Mr. V. Shaw. Mr. S. N. Pickard and Mr. McWillan gave an address on the work of the Proprietary Articles Trade Association. This, said Mr. Pickard, is now a well-organised body, with a membership three or four times as large as it was ten years ago. He hoped the time would soon come when every town in the country of any importance would have its Chemists' Association, which should be linked up to its County Federation. In regard to the question of profits, they could not always differentiate, particularly in much-advertised articles. Half a loaf is better than none. He thought if the members were guaranteed 15 per cent. on proprietary articles they would willingly say "Let them go on." When members received circulars from proprietors of non-protected articles it is not wise to throw them into the wastepaper basket. These people should be "gone for" hammer and tongs till they are brought into line. It was unanimously adopted: "That this meeting of the

Huddersfield and District Chemists' Association hereby places on record its unabated confidence in the Council of the P.A.T.A., and pledges itself to use all legitimate means in its power to bring proprietors of non-protected articles into line." A resolution of confidence in the P.A.T.A. was passed at the close of the meeting.

Liverpool.—A meeting of the Liverpool Chemists' Association was held at the Royal Institution, Colquitt Street, on November 10. The President (Mr. H. Humphreys Jones, F.C.S.), occupied the chair. The meeting was addressed by Dr. A. J. Barnes, of Dublin, on *The Work of the Proprietary Articles Trade Association*. Dr. Barnes began by contrasting the ease with which proprietary medicines are sold nowadays with the difficulties of twenty years ago, when customers were constantly arguing as to the prices at which these articles could be obtained. He admitted that the profit obtained on all P.A.T.A. lines is not so high as it should be, but the Council does its best to secure the highest rate possible. He outlined the procedure that is adopted when a manufacturer wishes to place his goods on the protected list. Where an article is a big seller and has been cut to the bone, it has to be recognised often that "half a loaf is better than no bread." It is better to have an article on the list with an assured, though small, profit than not to have it on the list at all. The expense of advertising, which cannot be avoided, is one of the reasons why more profit cannot be given on retail sales. This expense might be brought down if retailers would assist in the distribution of circulars. Many manufacturers will print the chemist's advertisement on the back of their bills if it is of a non-clashing nature. Greater advantage could also be taken of window-display offers, which is another means of reducing the cost of advertising and opening the way for more profit to the retailer. Dr. Barnes also referred to the harm which is done by "prescription" advertisements, in which no indication is given of the price of the proprietary ingredient. This matter is engaging the attention of the Council at the present time. In regard to the objection that certain proprietary articles are not on the list, he stated that Associations could help in this matter, and so could individual chemists by urging on the manufacturers and their travellers the desirability of protecting the retail price of their goods. In the past many articles have been added to the P.A.T.A. list by the policy of "keeping at it." He looked forward to the time when all chemists would support the Association—there is none that gives such good value for the subscription. Mr. T. S. Wokes proposed a vote of thanks to Dr. Barnes, which was seconded by Mr. J. G. Wallbridge and carried unanimously. Mr. G. H. Burroughs and Mr. McMillen next addressed the meeting, and Mr. W. H. Saunders referred to his scheme of pooling in regard to the patent-medicine trade. There should be a uniform profit, say, of 30 per cent., the retailer to get 20 per cent. and the wholesaler 10 per cent. Mr. McCaig, Mr. Harold Wyatt, and Mr. Jno. H. Robinson spoke next, the last-named suggesting that a strongly worded resolution from the Liverpool Chemists' Association to all the other Associations in the country would do a power of good. After some discussion in which Messrs. Pryor Jones, D. H. Evans, J. L. Hirst, H. H. Marsden, and others took part, the matter was left in the hands of the President, Hon. Secretary, and Mr. McCaig.

London Co.—A meeting of the Executive Committee of the London County Pharmaceutical Association was held at 17 Bloomsbury Square on November 16, Mr. A. R. Melhuish in the chair. A resolution was received from the West Ham Association endorsing the action of the London Organisation Committee, and suggesting the extension of their work so as to include Greater London. A recommendation was received from Middlesex for the establishment of an Organisation Committee embracing the whole metropolitan area. After full discussion it was decided to appoint Messrs. Bolwell, Hearle, Milner, Keith, Thompson, and Melhuish, with the Vice-President and Secretary as *ex-officio* members, as delegates to meet in conference delegates from the Associations adjacent to London County.

London S.E.—A meeting of the South-East London Pharmacists' Association was held at Maitland House, 134 Greenwich Road, Greenwich, on November 11, Mr. A. J. Wing (President) in the chair. A discussion took place on the proposed Drug Tariff for 1916. Mr. Techer, the County Secretary, gave an analysis of the conditions and terms under which pharmacists will serve. Mr. W. T. Tucker proposed that the meeting, having considered the Drug Tariff for 1916 agrees to accept service on the conditions approved by the delegates at the Local Associations Conference. This was seconded by Mr. J. Y. Fairweather, and the motion was carried unanimously. A discussion then followed on new patent-medicine prices, and

resolutions were carried protesting against the advertising of two prices for one size of Owbridge's Lung Tonic—viz., 1s. 1½d. size, 1s.; 2s. 9d. size, 2s. 6d. The members also agreed not to sign any private agreement to fix minimum retail prices on any article on which the profit offered when bought in small quantities is less than 20 per cent. on selling-price until the offer has been discussed by the Association. A discussion also took place on the recent combine of malt-extract manufacturers and wholesalers, which was reported to be resulting detrimentally to the interests of pharmacists. The discussion on this question was, however, deferred pending further information being obtained.

London (W.).—The Committee of the Western Pharmacists' Association has decided to postpone the dinner which was provisionally fixed for December 1, 1915.—Mr. A. R. Melhuish presided at a meeting of the members at the Restaurant Frascati, Oxford Street, W., on November 18, when Mr. P. F. Rowsell gave an address on *Price-protection*, the paper consisting of a review of the work of the P.A.T.A. A discussion followed, in which Messrs. Brough, Sturton, Barrett, Proctor, Fairweather, Lloyd, Atkins, and Widgery took part, asking various questions, which Mr. Rowsell and Mr. D. P. MacDonald (of the P.A.T.A. staff) replied to. The meeting was enthusiastic and fully attended. Seventeen new members have joined the W.P.A. since the last meeting.

Manchester.—A meeting of the Manchester Pharmaceutical Association was held on November 10 at 65 Market Street, when Mr. W. J. Uglow Woolcock, Secretary of the Pharmaceutical Society, gave an address on Insurance matters. About one hundred members and friends were present, among them being Mr. J. Rymer Young (Warrington), Mr. Deakin (Northwich), Councillor Percy Knott and Mr. Herbert Knott (Bolton), Alderman Simpson (Stalybridge), Mr. Wilson (Southampton), and a number of Salford pharmacists. The President, Mr. W. H. Delve, in his opening remarks, mentioned that chemists had that morning received their cheques for the *ex gratia* payments for 1913 and 1914, although he protested that the payments were theirs by right and not by any act of grace. He referred also to the appointment of two Manchester men on the Board of Examiners—Mr. James Grier, M.Sc., and Mr. Harry Wilson. Mr. Woolcock then addressed the meeting, commencing by paying a tribute to local men who have worked hard for the trade. Next referring to the new Drug Tariff, he said the key of the situation was the refusal of chemists to allow the discounting clause in the agreements. The new Tariff is a great improvement on the previous Tariffs, the discounting clause has disappeared, there will be prompt payment of accounts, and the pricing of prescriptions will be done by an official checker and the cost made an administrative charge. He concluded by expressing satisfaction that chemists have now come into their own, and will receive what is due to them. The President then invited discussion. Mr. J. Rymer Young was glad that chemists were to be relieved of the duty of pricing prescriptions. Mr. Harry Kemp said that with regard to the expenses toward the parent Society mentioned by Mr. Woolcock for Insurance working expenses, he thought the best plan would be to earmark a small contribution from every panel chemist towards the administration expenses of the Pharmaceutical Society. He hoped Manchester would set a good example by contributing liberally towards these expenses incurred by the National Executive. Mr. Mallinson said these contributions from panel chemists would be kept separate from the other Pharmaceutical Society expenses. Mr. Deakin also spoke, and Mr. Woolcock, having replied, was accorded a vote of thanks, on the proposition of Mr. F. W. Bates, seconded by Mr. Gill.

Middlesex.—A meeting of the Middlesex County Association was held on November 10 at Westwood House, High Holborn, London, the President (Mr. Herbert Skinner) in the chair. As this was the first meeting of the enlarged Executive a welcome was accorded to the new members, Messrs. Brunwell (North London), Taggart (Uxbridge), and Weston (Ealing). Mr. Palmer (Thames Valley) was unavoidably absent. Mr. Brunwell responded. The question of a complimentary dinner to the ex-President (Mr. John Humphrey) was discussed, but owing to reasons of health it was held over. The Secretary was asked to convey a resolution of sympathy and best wishes for a speedy recovery. Mr. Wolf raised the question of German-owned proprietors on the Proprietary Articles Trade Association's list, and was instructed to write to the Secretary on the subject. It was unanimously agreed to support the candidature of Messrs. Banker and Wolf for the election to the Retail Section of the P.A.T.A. Council. The President reported his experiences of the Local

Associations Conference. Arising out of the reports from district Associations it was agreed that the only satisfactory system of organisation was one where all the contiguous Associations are linked in one body, and it was decided to suggest a conference of the metropolitan area to discuss the matter, the delegates chosen for Middlesex being Messrs. Skinner, Wolff, Brunwell, and Clement.

Newcastle-upon-Tyne.—A meeting of the Newcastle-upon-Tyne Pharmacists' Association was held on November 10, the President (Mr. H. W. Noble) in the chair. A letter of congratulation was ordered to be sent to the Association's Hon. Solicitor (Mr. C. E. Layne) on his appointment as Under-Sheriff of Newcastle City. The business consisted of the consideration of the reports of the Conference delegates (Mr. T. M. Clague and Mr. T. H. Flemming), who both gave instructive impressions of the Conference. A discussion followed, in the course of which several members expressed themselves as in favour of withdrawing from the panel next month. It was ultimately decided, at the suggestion of Mr. Clague, that in order to ensure unanimity of action in this matter, the opinion of a majority of pharmacists on the panel should be obtained. For this purpose it was arranged that a general meeting of Newcastle panel pharmacists should be called as soon as possible after Mr. Woolcock's meeting in the Association's Rooms.

Nottingham.—A meeting of the Nottingham Pharmaceutical Association was held at the Flying Horse Hotel on November 17, the Vice-President (Mr. C. E. Reynolds) in the chair. The Association's delegates to the Local Associations Conference—Messrs. A. Middleton and F. Ross Sergeant—briefly reported, and Mr. E. S. Waring explained many points which cropped up in the course of the subsequent discussion. Mr. W. Gill quoted figures which went far to putting the new Tariff in a favourable light. A resolution was passed unanimously recommending the acceptance of the new Tariff. A letter from the Glasgow and West of Scotland Association, regarding the price of proprietary articles, was brought before the meeting, but consideration was deferred till the December meeting. The Chairman read a letter from Mr. Woolcock regarding the enlistment of pharmacists.

Nottingham Co.—A meeting of the Notts County Pharmacists' Association was held at Mansfield on November 17, Mr. Dickenson (President) in the chair. There were fourteen members present. It was reported that the Commissioners have asked the Notts Insurance Committee to give their reasons for refusing to allow the use of any Formulary and that the reasons have been supplied. The President, one of the delegates to the Conference, gave a report of the meeting, and the Secretary reported the meeting of the Pharmaceutical Committee held the previous day. Mr. Pegg submitted comparative priceings of several prescriptions by the two Drug Tariffs which did not show any great reduction. It was decided to price the January prescriptions in the same way and compare that figure. It was resolved to suggest to the Insurance Committee that a profit of one-third without the 0.8d. allowance be allowed on all surgery stock orders for dressings; also that if the Insurance Committee insists that all prescriptions written in cipher be copied in full, the copying-fee clause be reinstated.

Public Pharmacists.—The Council of the Public Pharmacists' and Dispensers' Association has communicated with Lord Lansdowne's Committee suggesting that pharmacists employed in public institutions should be "starred" and supplied with war-badges.

Salford.—A meeting of the Salford Pharmacists' Association was held on November 11 at 40 The Crescent. The President (Councillor J. Jones) was in the chair. Mr. P. F. Rowsell (Exeter) gave an address on the history and work of the Proprietary Articles Trade Association. A discussion followed, and a vote of thanks was passed to Mr. Rowsell.

Shropshire.—The annual meeting of the Shropshire Pharmacists' Association was held in Shrewsbury on November 11, Alderman W. G. Cross, J.P., presiding. The balance-sheet was adopted. Mr. T. R. Sparrow was then elected *President*, and Mr. Cross was thanked for his services. Mr. G. Dunn was elected *Vice-President*. The following officers were also elected: *Treasurer*, Mr. A. Williams; *Hon. Secretary*, Mr. W. G. Cross, jun.; *Committee*, Messrs. A. Day, Barnes, G. Dunn, Pickin, Gouldbourne, Woodhouse, and Hunt. Mr. Williams, as delegate to the Local Associations Conference, gave an interesting account of his visit. A discussion followed, and it was agreed that the new Tariff for 1916 is a step in the right direction. The establishment charge of 0.8d. was considered altogether inadequate. However, the difficulties of

proving another figure in mixed country businesses are almost insurmountable. The sum of 27. 2s. was voted to the Benevolent Fund.

Swansea.—A meeting of the Swansea and West Glamorgan Chemists' Association was held on November 11 at the Hotel Cameron, Swansea, the President (Mr. Arnold) in the chair. A vote of sympathy was directed to be sent to Mr. J. T. Davies in his long illness and an earnest wish for his speedy recovery. The chief item under discussion was the Tariff for 1916. One member considered the resulting Tariff as a product of the weakness of our representatives in signing the new Regulations with only feeble protests, and without first consulting panel chemists financially interested in the matter. A resolution to this effect was passed. Mr. Arnold, of Cwmavon, gave a *resumé* of what passed at the last mass meeting of chemists at Neath, emphasising the necessity for every chemist to sign for the emergency settlement in order further to benefit from a share of Mr. Montague's grant of 60,000l. Mr. Arnold estimated that the discount on contracts for 1914 would probably be reduced eventually to 10 per cent. It was resolved at the meeting that further efforts be made for the exemption of chemists from petty juries and the rescinding of the Shops Act, 1912, as regards chemists.

Ucal.—The annual meeting of the Ucal Lodge of Pharmacy was held on November 11 at the Holborn Restaurant, London, when the following new officers and Committee were elected: *President*, Mr. J. Hearle, Islington, N.; *Vice-Presidents*, Mr. C. W. Brumwell and Mr. J. Milner; *Treasurer*, Mr. W. C. Matthews; *Secretaries*, Mr. G. W. Evans and Mr. Dan Davies; *Committee*, Messrs. Hall, Keith, Mills, Payne, Thompson, and Wigginton; *Auditors*, Messrs. Bennett and Thomson. After discussing the new advertising scheme Mr. Harold Miller addressed the members on the progress of Ucal during the last twelve months. He said the sale of Cheltenham water has increased to an enormous extent, and orders are coming in from all parts of the world. A vote of thanks was accorded to Mr. Miller.

The Pharmacist and the Public.

Extracts from an address by Mr. William Kirkby, M.Sc., Ph.C., F.C.S., to the Liverpool Chemists' Association on Wednesday evening, November 17:

A serious danger in the present state of affairs needs to be pointed out and guarded against. If pharmacists are going to allow their outlook to be circumscribed by the National Insurance Act, they are going to degenerate into the machinery of mere State dispensaries, and will never attain to anything more than a sufficiency to make ends meet. This must not be. The present State recognition must be employed as a means to display the knowledge and efficiency of qualified pharmacists, so as to make clear the rightful claim of pharmacists to be entrusted with the compounding of the medicines of the whole country. This claim should be immediately buttressed by the adoption of a proper curriculum for the training of pharmacists. I am persuaded that in order to support our claims to do the whole of the nation's dispensing a proper curriculum is urgently necessary to ensure a proper supply of trained dispensers and to command the respect and good will of the medical profession and the public. Along with this must be taken the division of the Qualifying examination into two parts; the dividing line is quite easy to be made, because the examination consists of only two classes of subjects—namely, the purely scientific ones and the technical ones. The former can be acquired at any of the numerous science schools now found throughout the country, and the technical subjects can be learned at the pharmacy schools in London and the provinces. The recognised schools of pharmacy, if proprietary, could, if thought necessary, be licensed after inspection. In any case, it would be found, I believe that such schools would be glad to be relieved of teaching science subjects if there was a prospect of their having to provide a curriculum in purely pharmaceutical subjects. These suggestions should be submitted for the consideration of an influential body of pharmacists representing the different parts of Great Britain. The National Insurance Act has put a new complexion upon the pharmacist's contention that he should do the dispensing, while the doctor should confine his attention to the prescribing. It has recognised and established the reasonableness of the pharmacist's claim. It rests upon pharmacists to use means at once to achieve the remainder, and make the medical profession and the public recognise that he can adequately fulfil every demand made upon him in the matter of dispensing medicines and supplying all adjuncts to medical and surgical treatment.

Trade Report.

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling and the like. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities. Retail buyers cannot, therefore, for these and other reasons, expect to purchase at the prices quoted here.

42 Cannon Street, E.C., November 18, 6.30 p.m.

THE markets have been quieter this week, particularly as regards trading in synthetic chemicals, the prices of which continue to restrict business to current wants. With the exception of a weaker tendency in acetyl-salicylic acid and hexamine, the bulk of prices in this group are very firm and with a rising tendency. The second-hand quinine market is dominated by the export embargo, and prices are unsettled. Ipecacuanha and opium are very firm. Agar-agar, chamomiles, isinglass, and lemon oils are more or less cheaper. The bulk of the seed-oils are again on a higher basis, these including castor, palm, rape, soy, linseed, and coconut oils. Among spices, African, Cochin, and Calicut gingers, pimento and cloves are all dearer. Changes in druggeries include an advance in rosin, turpentine oil, copper and ammonium sulphates. Shellac and Chinese crude antimony are dearer. The principal changes are as under :

| Higher | Firmer | Easier | Lower |
|-----------------------------------|-----------------|------------------------|--------------------|
| Antimony (crude) | Ammon. sulph. | Acetyl-salicylic acid | Chamomiles |
| Castor oil | Balsam | Agar-agar | Isinglass |
| Cocoa-butter | Canada | Citric acid | Lemon oil |
| Copper sulphate | Clove oil | Cottonseed oil (crude) | Spike lavender oil |
| Ginger (African, Cochin, Calicut) | Coconut oil | | |
| Palm oil | Linseed oil | | |
| Potash perm. | Milk-sugar | | |
| Rosin | Oxalic acid | | |
| Turpentine | Pimento | | |
| | Rape oil (ord.) | | |
| | Shellac | | |
| | Sodium cyanide | | |
| | Soya oil | | |

Cablegrams.

NEW YORK, November 11.—Menthol is easier at \$3.40. Cartagena ipecacuanha has advanced to \$2.40, and Mexican sarsaparilla is firmer at 1½c. per lb. Belladonna-root is higher at \$2.60, and senega is also firmer at 38c. per lb. Short buchu has advanced to \$1.25. Opium and peppermint oil are unchanged. [Delayed by censor.]

NEW YORK, November 18.—Business in drugs is fair. Opium is higher at \$11.00 per lb. Menthol is lower at \$3.25, and Curaçao aloes is easier at 12½c. Cartagena ipecacuanha has advanced to \$2.50, hydrastis to \$4.50, buckthorn-bark to 40c., balsam peru to \$4.25, and guarana to \$1.25.

ACETIC ACID.—For 80-per-cent. commercial 87l. 10s. per ton ex wharf is quoted.

ACID, ACETYSALICYLIC, is offering at 42s. 6d. per lb. for prompt delivery, but for January delivery onwards much lower prices are quoted.

AGAR-AGAR.—The spot price is easier at 3s. per lb.

AMERICAN DRUGS.—The following are a few current net quotations on spot: *Barks*, bayberry, 6½d.; *slippery elm*, 9d.; *sassafras-root*, 10½d.; *riburnum* of tree, 9½d.; *thin wild cherry*, 7½d.; and *witchhazel*, 4½d. per lb. *Leaves*, *damiaena*, 7½d.; *witchhazel* 5d. *Roots*, *calcears*, 8d.; *hydrastis*, 22s. to 22s. 6d. per lb., as to quality; *kava-kava*, 1s. 3d.; *mandrake* (podophyllum), 58s. per cwt.; Mexican *sarsaparilla*, 9½d.

AMMONIA SULPHATE is very firm. London is 5s. dearer at 15l. per ton net, naked at works, for 25-per-cent. ammonia; Hull prompt, 24-per-cent., is 5s. to 7s. 6d. higher

at 15l. 15s. Liverpool is 2s. 6d. to 5s. higher at 15l. 17s. 6d., and Leith is 5s. higher at 16l. per ton in bags f.o.b., less 3½ per cent.

ANISE.—Russian in Liverpool is offered at 33s. per cwt. net.

ANTIMONY, CHINESE.—Crude has advanced about 3l. per ton to 80l. on the spot.

ATROPINE continues very scarce at about 120s. per oz. for the pure alkaloid and 110s. for the sulphate.

BALSAM CANADA is firmer at 4s. 3d. net on spot, and to arrive the same figure is quoted.

BALSAM COPAIBA.—Filtered is quoted 1s. 10d. and Maranham filtered 1s. 11d. per lb. on spot.

BROMIDES.—Buyers continue to restrict their requirements to the smallest possible extent at present level of prices, which are from 17s. 6d. to 18s. for potassium, 14s. 6d. to 15s. for sodium, and 20s. for ammonium.

CALABAR-BEANS are offered on spot at 8½d. per lb. net.

CAMPHOR.—Japanese refined slabs offer on the spot at 1s. 6d. per lb.

CASCARA SAGRADA.—New bark is quoted 50s. to 52s. 6d. on the spot and 1913 at 53s. 6d. During the summer of 1915 over 250,000 lb. of cascara sagrada was gathered in British Columbia. The collection is done principally by Japanese and Indians, who, unfortunately, have not exercised the care necessary to ensure the life of the shrub, and unless pressure is brought to bear and explicit directions given to leave a strip of the bark on, British Columbia will be in as bad a condition as California and Washington. We understand, says the "B.C. Phar. Record," however, that the cascara on Indian reserves cannot now be collected without a permit. One carload was purchased in Vancouver by a large Eastern manufacturing firm, and the report is that the bark is the finest sample that firm has seen for some time.

CASSIA LIGNEA.—Fair selected on the spot is quoted at about 60s. per cwt.

CASTOR OIL.—The principal English makers appear to be sold out until March. They quote finest medicinal quality for March at 50l. 10s., April 49l. 10s., and May-June delivery 48l. 10s. per ton, barrels included, f.o.b. Hull, usual terms. First pressing is 3l. 10s. per ton less than the foregoing. There is a great scarcity for prompt delivery, and medicinal has been sold up to 64s. and first pressing at 59s. In Liverpool good seconds Calcutta is quoted in cases at 6d. per lb. ex store with little offered, and at 4½d. e.i.f. for forward shipment.

CHAMOMILES.—Good pale French are offered at the lower price of 120s. on the spot.

CINCHONA.—At the London auction on Tuesday 520 bales Calisaya offered, of which 186 sold at from 8d. to 8½d. per lb. for quill and 7½d. for country-damaged.

CITRIC ACID continues dull at 2s. 11d. per lb. spot.

CLOVE OIL is firmer from distillers' hands at 5s. 2d. to 5s. 4d. per lb., the lower figure being for large quantities.

CLOVES are firmer, with sellers of fair Zanzibar at 8½d. spot; to arrive sellers of November-January quote 6½d. c.i.f., and for December-February 6d. c.i.f. has been paid.

COCAINE.—There is a stronger undertone on the part of makers owing to the fact that the cost of manufacture is for technical reasons on a higher basis. The value of hydrochloride is from 13s. to 13s. 3d. per oz., less 5 per cent. from dealers.

COCOA-BUTTER.—Sellers of best English ask 2s. to 2s. 1d. per lb.

COD-LIVER OIL.—Our Bergen correspondent writes on November 8 that the quotation for medicinal cod-liver oil is still nominal, no business having been done. In London there is also very little inquiry at the moment, the value of best 1914 oil being about 340s. ex wharf. At the same time one agent in London states that his principal's price is 380s. per barrel f.o.b., and others ask from 340s. e.i.f. and upwards. There has been a good demand for Newfoundland oil, sales of a well-known brand being made at 275s. per barrel; stocks are now very limited.

COPPER SULPHATE is very scarce and again higher at from 40l. to 41l. per ton for November-January delivery.

CREAM OF TARTAR is unchanged at 185s. per cwt. spot for 98-per-cent. powder.

GALLIC ACID.—A limited quantity is offered at 4s. 3d. per lb. *Tannic Acid* is 4s. to 4s. 6d.

GINGER.—The sales in Liverpool include 50 tons Sierra Leone at 27s. per cwt., but sellers ask 1s. advance on these prices. In London prices of Calicut ginger have risen about 3s. and Cochin 1s. 6d. to 2s. per cwt.

HEXAMINE is offered at from 5s. 3d. to 5s. 6d. on the spot; fair stocks are available.

HYDROQUINONE.—Business has been done at from 25s. to 26s. per lb.

IPÉCACUANA is very firm, sellers of Matto Grosso asking 17s. and Cartagena 15s., with sales of the latter at 14s.

IRON SULPHATE is difficult to obtain owing to labour shortage; 70s. per ton f.o.b. is quoted.

LEMON OIL.—Prices of new crop are irregular, shippers offering at from 3s. 6d. to 3s. 10d. per lb. c.i.f., the spot values being from 3s. 9d. to 4s.

LITHIA CARB. is offered at from 4s. 10d. to 5s. per lb. net on spot; some ask 5s. 6d.

MENTHOL is quiet at 11s. 6d. per lb. spot for Kobayashi-Suzuki; November-December shipment is quoted 11s. 9d. and oil 3s. 6d. c.i.f.

METHYL SALICYLATE is quoted at from 13s. to 13s. 6d. per lb. on spot.

MILK-SUGAR.—There is a report current that the Dutch have placed an export-tax on milk-sugar, but there is no confirmation of this by those in close touch with the Dutch makers. Sales have been made at from 71l. to 72l. per ton, but 73s. is a more general price at the close.

MUSK (ARTIFICIAL).—Xylol is quoted by makers at 45s. per lb.

NUX VOMICA.—Business has been done at from 17s. 6d. to 18s. per cwt. c.i.f. London, and buyers.

OILS (ESSENTIAL).—The following are current quotations: *Star-aise* is 3s. c.i.f. for "Red Ship," being slightly better; spot is 3s. 3d. to 3s. 4d. after selling at 3s. 3d.; white essential *Camphor* is 75s. per cwt.; English distilled *Juniper B.P.*, 10s. per lb. net; best American *Sassafras*, 3s. 6d. net; and English *Sandalwood* oil, 31s. *Spike Lavender* is offered at 4s. 6d. per lb. net. *Bergamot* on spot, 15s. 6d. net. French *Rosemary*, 2s. 5d. net; red *Thyme*, 5s. 6d. net.

OILS (FIXED).—*Linsced* is 10½d. dearer at 33s. 1½d. in pipes and 7½d. dearer at 33s. 10½d. per cwt. in barrels on spot. *Cottonseed* is slightly easier at 35s. 9d. to 34s. for crude in pipes on spot, refined in pipes being quoted 35s. 6d., and sweet refined in barrels at 39s. to 41s. *Cocunut* is firmer at 45s. for Ceylon and 47s. to 49s. for Cochin on spot; London pressed is 9d. higher at 39s. 9d. *Rape* is 1s. firmer at 39s. for ordinary brown crude, naked, and unchanged at 41s. to 42s. for British refined in barrels; Japan in cases is dearer at 36s. 4½d. c.i.f. for October-November shipment. *Soya* is 1s. firmer at 29s. 3d. c.i.f. on passage for Manchurian in cases; Hull (spot) extracted is 30s. Lagos *Palm* on spot dearer at 36s., and in Liverpool the higher price of from 34s. 9d. to 35s. is quoted forward. *Turpentine* closes at 43s. 10½d. spot.

OPUM continues a strong market, and there appears to be little likelihood of a decline. Small sales of good Turkey druggists' have been made on spot at 35s. per lb. for 11-per-cent. Persian is selling steadily, and, although arrivals continue to take place, they are in firm hands; prices range from 19s. 6d. to 23s. 6d. per lb. on the spot, as to test.

PEPPERMINT OIL.—American (H.G.II.) is quoted 14s. 3d. to 14s. 6d. per lb. London terms, and so-called Wayne County in this to arrive is offered at from 9s. to 9s. 6d. per lb. net.

PHENOLPHTHALEIN.—Quotations show a wide range; sales have been made at 30s. per lb.

PILOCARPINE is very scarce, small lots of nitrate offering at 15s. per oz.

PIMENTO.—Spot sellers ask 2½d. per lb., being an advance of ½d.

POTASH IODIDE of Japanese make is offered by dealers at from 14s. to 15s. per lb., less 5 per cent.

POTASH PERMANGANATE.—A British Government order for about 4 tons seems to have cleared up the market, and fantastic prices are now being quoted.

POTASH PRUSSIAN is quoted at from 2s. 9d. to 3s. per lb. *Sodium prussiate* is nominal at 1s. 9d.

QUICKSILVER.—Steady at from 16l. 12s. 6d. to 16l. 15s. per bottle.

QUININE.—The embargo on exports continues to weigh heavily on this market, and in certain quarters, where parcels were bought for shipment to the U.S.A., every opportunity is taken of realising. Business has been done in small lots at 3s. 9d. up to 4s. 6d., but 4s. to 4s. 3d. are the closing values, with here and there a weak holder. Permits, are, of course, being granted to exporters to the Colonies and British Possessions for their legitimate demands.

In view of the embargo on exports the following figures relating to imports from and exports to the U.S.A. are of interest:

| Imports from U.S.A. to London. | | Exports to U.S.A. from London. | |
|--------------------------------|---------|--------------------------------|---------|
| 1915. | oz. | 1915. | oz. |
| June | 97,900 | June | nil |
| July | 271,000 | July | 340 |
| August | 117,000 | August | 50 |
| September | 168,686 | September | 1,600 |
| October | 91,198 | October | 200,472 |
| | | Up to November 3 | 34,920 |
| Total | 745,784 | Total | 237,368 |

SALICYLATES are unchanged. Salicylic acid is quoted at from 16s. 6d. to 17s. and sodium salicylate at from 17s. 6d. to 18s. per lb.

SALOL.—The value is from 42s. 6d. to 45s. per lb.

SENEGA.—For forward delivery 2s. 0½d. to 2s. 1d. per lb. c.i.f. is quoted, as to seller, the spot price being 1s. 11d. net.

SHELLAC is firmer at 74s. per cwt. spot for the usual standard TN Orange; fine Orange being worth 88s. 6d. to 90s.; AC Garnet is 69s. and GAL 64s.

SODA HYPOSULPHITE has been selling at from about 17l. to 19l. per ton, as to quantity.

SOY is quiet at 1s. 11d. per gal. duty paid for Seuloong.

SPEERMACEIL.—American refined in cases is quoted at from 9d. to 9½d. per lb. net, as to quantity.

SULPHUR.—The imports to the United Kingdom in October were good, being 51,420 cwt., and the ten months (January-October) show an increase of 183,705 cwt. over the 1914 figures. Spot prices of flowers are unchanged at from 11l. to 12l. per ton, and *Roll* 10l. 10s. ex wharf London.

TARTAR EMETIC is offered at 2s. 6d. per lb.

TARTARIC ACID. Very firm and scarce at 2s. 6d. per lb. for powdered, crystals being almost unobtainable.

TONKA BEANS.—Angostura are quoted 3s. 3d., frosted Para at 2s. 6d., black at 1s. 11d., and foxy 1s. 7d. Demand since the war has been extremely small.

VANILLIN.—Following on the advance of Continental makers' prices announced last week second-hands have now brought their rates more in accordance with first-hand conditions, asking from 37s. to 40s. per lb.

WITCH-HAZEL EXT. is quoted at 8s. 3d. net per gal. in casks on spot.

Java Quinine.

The annual report of the Bandoeng Quinine-factory for 1914 is published in the "Indische Mercuur," in the course of which it is stated that "at the beginning of that year the condition of the cinchona market was normal, as a result of the operation of the agreement between cinchona-planters and quinine-makers; the war, however, disturbed the regular course of affairs. In the course of the second year of the agreement, which began on July 15, 1914, all makers together bought about 76½ per cent. of the total quantity of 515,000 kilos. of quinine in bark-form, which they had agreed to buy. The German makers in particular were obliged to reduce their purchases. The Dutch factories, on the contrary, and also the Bandoeng factory, increased their output as soon as the first general confusion of the war had passed. In 1914 the Bandoeng quinine-factory bought the whole quantity of cinchona-bark, which it had bound itself to purchase under normal circumstances, and in 1915 it bought even a much larger quantity. During the course of 1914 the bark unit remained at 6.2c. In 1914 the quantity of quinine sold by the Bandoeng factory was a little smaller than that of 1913; the sum that was received for it in 1914, however, amounted to 1,519,558fl., and exceeded the sum that was received in 1913 by 424,165fl. This was due to the fact that the sale-price was much higher in 1914 than in 1913—viz., 30m. per kilo. in 1914 (official price), only 14l. at the beginning of 1913, and 16.50fl. on July 15, 1913. The factory has been working without interruption throughout the whole year. At the beginning of 1914 it slightly reduced its production, as the demand for quinine had fallen off, but by degrees it had to be increased again in order to cope with the larger demand. The net profit amounted to 232 615fl., the highest profit the factory has ever made. Most probably this figure will even be higher in 1915, as the quantity of quinine that has been sold during this year considerably exceeds that of other years. The profit now earned is higher than it could ever have been under normal circumstances, thanks to the cinchona agreement. A dividend of 23½ per cent. has been paid to the shareholders.

Arrivals of Chemicals, Drugs, etc.

During the period November 10 to 16, inclusive, the following produce has arrived at the English ports stated. Goods in transit are not included. The figures denote packages where not specifically described:

| | |
|--|---|
| <i>To London.</i> | Lemon oil (Messina) $\frac{1}{2}$ cs. 12, (see also Ess. oils) |
| Acetanilide (N. York) brls. 14 | Lime-juice (Halifax) pns. 117 |
| Acetic acid (Philadel.) brls. 60 | Linsced (Calcutta, etc.) bgs. 26,466 |
| Acetone (Philadel.) dms. 760 (N.Y.) dms. 40 | Liquorice-juice (Sicily) pks. 359 |
| Agar-agar (Kobe) bls. 90 | Lithopone (Rotterdam) 512 |
| Albumen (Shanghai) cks. 11, cs. 114, (N.Y.) cs. 20 | Magnesium metal (Montreal) dms. 14 |
| Alcohol, wood (Philadelphia) dms. 236 | Milk-powder (Rotterdam) 200 |
| Ammon. phosph. (Philadelphia) brls. 99 | Mineral waters (Dieppe, etc.) cs. 2,390 |
| Anise, star (H.-Kong) cs. 85 | Mineral white (Genoa) 300 |
| Antimony ore (H.-Kong) 280, (Singapore) 4,719, (Melbourne) 5,585 | Mint oil (Kobe) cs. 10 |
| Aprirot Kern. (Valencia) 98, (Shanghai) 526 | Naphthalene (R'dam) cks. 12 |
| Arachis oil (Rotterdam) cks. 800 | Nutmeg (Penang) cs. 16 |
| Argol (Bordeaux) 202, (Oporto) 167, (B'ona) 78, (Catania) 11 | Nux vom. (Madras) bgs. 40 |
| Arsenic (Oporto) brls. 107, (N.Y.) kgs. 450, (Melbourne) cks. 62 | Olcum (Rotterdam) brls. 200 |
| Barium hydrate (Genoa) 27 | Oliblanum (Bombay) cs. 270 |
| Barytes sulphate (Bordeaux) cks. 14, bgs. 37, (Genoa) 20, (Barcelona, etc.) bgs. 1,000, (Leghorn) brls. 78 | Olive oil (Marseilles) cs. 16, (Bordeaux) cs. 104, (Genoa) pks. 12, brls. 25, (Malaga) brls. 100, (Leghorn) $\frac{1}{2}$ pps. 15 |
| Benzoin (Singapore) cs. 86 | Opium (Marseilles) cs. 28, (Bombay) cs. 88 |
| Calcium carbide (Go'burg) dms. 1,000 | Orris (Leghorn) 50 |
| Calcium chlor. (N. York) 74 | Pepper (Batavia) 1,200, (Singapore) 4,287 |
| Calcium citrate (Amsterdam) 62 | Perfumery (Boulogne) cs. 11, (Dieppe) cs. 54 |
| Camphor, ref. (Kobe) cs. 226 | Pimento (Halifax) 100 |
| Canary-seed (Spain) bgs. 900 | Quebracho ext. (B. Ayres) pks. 10,873 |
| Carapusms (Bombay) 48 | Quicksilver (Leghorn) bots. 250 |
| Caraway-seed (Holland) bgs. 125 | Quinine (Amsterdam) cs. 170 |
| Cascara sag. (Philadel.) sks. 1,866 | Rape-seed (Kobe) bgs. 1,750 |
| Cascin (Paris, etc.) bgs. 546, (Bombay) 206 | Rape-seed oil (Japan) cs. 6,000 |
| Cassia-bark (H.-Kong) cs. 1,200, (Japan) 57 | Rhubarb (Shanghai) cs. 18 |
| Cellulose acet. (Treport) cks. 31 | Roots, barks, herbs, etc. (Marseilles) bls. 15, (N. York) 98 |
| Chamomiles (Kobe) cs. 60 | Rose oil (Marseilles) cs. 12 |
| Chemicals and drugs (Paris) cs. 36, (N. York) pks. 284, (Treport) pks. 33 | Rosin (U.S.A.) brls. 3,500 |
| "Chemicals, medicines, perfumery, etc." (N. York) pks. 511 | Saltpetre (Calcutta) 468 |
| Chillies (Bombay) pks. 842 | Sandalwood (Bombay) bdls. 160 |
| Cinchona (Amst.) bls. 764 | Senna (Marseilles) 74 |
| Cinnamon (Colombo) 500, (Marseilles) 1,000 | Shellac (Calcutta) cs. 3,719, <i>button</i> 74 |
| Cochineal (L. Palmas) 20 | Soda, caustic (Uddevalla) dms. 30, cs. 39 |
| Coconut oil (S'pore) cs. 750, pks. 67, (Colombo) pps. 143, cyl. 10, hds. 6, pks. 186 | Soda nitrate (Tocopilla) bgs. 30,150 |
| Copper sulphate (Marseilles) brls. 200 | Soda oxalate (Treport) cks. 27 |
| Cream of tartar (Bordeaux) cs. 10, (N. York) brls. 56 | Soda sulphite (Paris) cks. 10 |
| Cubebes (Singapore) cs. 25; stems bgs. 25, (Bombay) 5 | Soda, undescribed (Sweden) cks. 27 |
| Drugs (Philadel.) cs. 28 | Sodium metal (Genoa) cs. 200 |
| Elemi (H.-Kong) cs. 57 | Soy (H.-Kong) cks. 150 |
| Essential oils (Marseilles) pks. 44, (N.Y.) cs. 131, (Messina) pks. 130, (Malaga) cs. 10 | Soya-bean oil (Kobe) cs. 8,000 |
| Eucalypt. oil (Melbourne) 60 | Squill (Malta) 22, (Catania) 11 |
| Farina (Amsterdam) bgs. 150 | Sulphur (Catania) pks. 13,239 |
| Fig syrup (Philadel.) cs. 2,700 | Tamarinds (Calcutta) 100 |
| Formaldehyde (N.Y.) brls. 70 | Tannic acid (Montreal) brls. 80, (N.Y.) 10 |
| Formic acid (R'dam) blns. 36 | Tartar (France) 465, (Barcelona) 10, (Alicante) 320 |
| Gelatin (Treport) cs. 6, (N.Y.) 9 | Tartaric acid (Leghorn) cks. 32 |
| Gentian (Barcelona) 25 | Thorium nitrate (Philadel.) cs. 35 |
| Ginger (Bombay) bgs. 350 | Turpentine (U.S.A.) brls. 1,500 |
| Glucose (Philadel.) 483 | Wax, bees' (Chile) cs. 60, (Marseilles) 37, (H.-Kong) pks. 7, (Rotterdam) 35, (Spain) 26, (Japan) bgs. 40 |
| Glycerin (R'dam) dms. 33 (Auckland) dms. 12 | Wax, undescribed (Marseilles) bls. 402 |
| Gum, acacia (Bombay) bgs. 488 | Wax, vegetable (Kobe) 125 |
| Gum copal (Singapore) pks. 227, bkts. 395, (Maassar) 1,304, (Amsterdam) 75 | Wine-lees (Messina) bgs. 450, (Alicante) 812 |
| Gum damar (S'pore) bgs. 439 | Zinc oxide (Rotterdam) 125, (N.Y.) 600 |
| Gum kauri (Auckland) cs. 417, bgs. 227 | <i>To Liverpool.</i> |
| Gums, undescribed (Marseilles) 57, (Bombay) bgs. 275, (Adelaide) bgs. 2,080 | Alum powder (Montreal) cs. 28 |
| Honey (Auckland) cs. 10 | Ammon. mur. (Skien) cks. 306 |
| Indigo (Madras, etc.) cs. 199 | Ammonia salts (Havre) cks. 24 |
| Lead acetate (N. York) brls. 54 | Antimony (Chile) 6,374, (Halifax, etc.) brls. 204 |

Cuttle-fish bone (W.C. Africa) pks. 12
 Ivi-divi (Curacao) 1,851
 Drugs, etc. (N. York) cs. 236
 Formaldehyde (N.Y.) brls. 61
 Drugs (N. York) cs. 67
 Glucose (N. York) brls. 300
 Gums, undescribed (W.C. Africa) cs. 2,494
 Honey (Callao) 62
 Indigo (Alexandria) brls. 700
 Iodine (Iquique) kgs. 112
 Ipecac. (M. Vidco) 2
 Linsced (R. Plate) tons 1,050
 Mineral white (Bordeaux) 500
 Olive oil (Valencia) cs. 15
 Palm oil (W.C. Africa) cks. 1405
 Palm-kernels (W.C. Africa) cs. 34,517, tons 180
 Pepper (Havre) 30
 Perfumery (Havre) cs. 56
 Quicksilver (Spain) bot. 42
 Quinine (Alexandria) cs. 4

Rosin (U.S.A.) 1,100
 Soda, undescribed (N. York) brls. 40
 Wax, bees' (Chile) 15
 Wax, carnauba (Ceara) 33
 White oil (St. John's, N.F.) 162
 Zinc oxide (N. York) brls. 150, (Rotterdam) 50

To Manchester.

Arachis oil (Rotterdam) cks. 60
 Calcium silicate (Rouca) cks. 134
 Caraway-seed (Rotterdam) 200
 Dextrin (Rotterdam) bgs. 750
 Farina (Rotterdam) bgs. 6,060
 Formic acid (Rotterdam) cks. 20
 Lemon oil (Palermo) cs. 2, $\frac{1}{2}$ es. 1
 Medicines (Boston) cs. 70
 Sulphur (Catania) bgs. 8,632, brls. 397

To Bristol.—Formaldehyde (N. York) brls. 56; olive oil (Lisbon) brls. 11; saffron (Valencia) cs. 1; zinc oxide (N. York) 300. *To Folkestone.* Drugs (Boulogne) pks. 81; perfumes (France) pks. 19. *To Goole.*—Farina (Rotterdam) bgs. 320; madder (Rotterdam) cks. 6. *To Grimsby.*—(Chemical prod. (Dieppe) cks. 25; dyes (Dieppe) cks. 487. *To Hull.*—Castor-seed (Bombay) 19,555; chemical prod. (N.Y.) dms. 8, (Dunkirk) bgs. 428; chlorine (N.Y.) cyl. 20; cotton-seed (Alexandria) cwt. 79,780; cream of tartar (Marseilles) cks. 20; essential oils (N. York) cks. 56; gentian (Marseilles) 30; glucose (N.Y.) brls. 370; glycerin (Amsterdam) dms. 225; linsced (Bombay) 1,230, (River Plate) bgs. 57,976; liquorice-juice (Naples) cs. 68; magnes. carb. (Amsterdam) 60; peppermint oil (N.Y.) cs. 5; potash caustic (N.Y.) dms. 16; sulphur (Marseilles) brls. 10; wax, vegetable (N. York) bgs. 45. *To Southampton.*—Gelatin (Monteur) pks. 25.

Heavy Chemicals.

Manchester, November 16.

There is a continued strong feeling in heavy chemicals, and it is quite evident that producers are greatly exercised in supplying goods on contract account; this is especially the case with caustic soda and bleaching-powder. Sulphate of copper continues to advance, and is quoted at from 40/ 10s. to 41/ 15s. per ton, delivered Manchester. Bichromate of soda is 1d. per lb. higher, and advances of almost similar character are to be noted in chlorate of potash and yellow prussiate. Tartaric acid is higher at 2s. 6d. per lb. Coal-tar products are scarcely quotable; carbolic acid and benzols remain under Government control, and only fugitive orders can be placed locally. Sulphate of ammonia is 15/ 10s. to 15/ 12s. 6d. per ton, on rails, Manchester.

American Drug and Chemical Markets.

New York, October 31.

There were many sensational uplifts in prices during the month. Morphine was advanced 50c. and codeine sulphate by 70c. per oz. Chloral hydrate was advanced to \$1.26 per lb. in 100-lb. lots, and chloroform, owing to the growing scarcity, was advanced to 40c. per lb. in 50-lb. lots.

BALSAM PERT is firm, as stocks are small, and \$4.20 is an inside figure; some dealers ask \$4.25.

BETA-NAPHTHOL is easier, owing to a larger domestic production, and prices have been reduced to \$1.50 per lb.

BROMIDES.—All the bromides are now selling at \$5.50 to \$6.00 per lb., and dealers are supplying only 1 lb. to a customer.

CANNABIS INDICA.—Genuine East Indian tops are being maintained at \$1.90 to \$2.00, owing to the prohibition of imports.

COPAIBA.—South American is stronger. The demand has increased, and 35c. is now quoted. Para is also firmer at 32c. to 33c.

GOLDEN SEAL.—The increased demand has led to a firmer tone, sellers now asking \$4.35 to \$4.40 per lb.

MENTHOL is firmer and continues to rise, owing to an upturn in the primary market. The quotation in case lots is \$3.50 per lb.

OIL, PEPPERMINT (AMERICAN).—Offers from the West are still very light, and reports of shortage in the peppermint-crop prompted some holders to raise the price to \$1.90.

OIL (SWEET BIRCH) has been advanced sharply, owing to increased scarcity; quotations are now \$3.50 to \$4.00.

OPIMUM is very strong at the advance to \$10.00 in cases, and the tendency is upward. Powdered gum is held at \$11.25 to \$11.50, and granulated at \$11.50 to \$11.75.

PHENACETIN has risen to \$15.00 to \$17.00 per lb.

QUININE.—The market remains very firm. Second-hands are asking \$1.50 per oz. in 25-oz. cans, and sales have been reported as high as \$2.00 to \$2.50 per oz.

SALOL seems to have disappeared entirely from the market. Dealers now ask \$8.00 to \$8.50.

Japanese Camphor.

The officials of the American Commerce Department, writing to Washington, report that the Japanese Government "has announced that from October 1 the price of crude camphor placed on the market by the Monopoly Bureau will be increased by 74.7c. (American gold) to \$23.386 per 100 lb. On the other hand, the market for refined camphor remains depressed. There are no buyers of slab camphor even at \$23.157 per 100 lb. Though some orders are arriving from the United States, this is not sufficient to revive the market to any appreciable degree. In these circumstances camphor-refiners will be put to considerable difficulties." [We may add that the price of Monopoly crude camphor from the Bureau was at the same time advanced by 5s. per cwt. to U.K. buyers.—EDITOR.]

Continental Drug and Chemical Markets.

The following notes chiefly refer to the Hamburg and Berlin markets up to date of November 3:

AGAR-AGAR has been sold at from m.8.75 to m.9.50 per kilo., as to quality.

AMMON. CARB. is very scarce and in active demand at from m.405 to m.410 per 100 kilos.

AMYL PREPS.—Both technical and c.p. has been advanced by m.20, also amylie alcohol by m.20 per 100 kilos.

ANISE has been sold in large quantities, including Spanish for November delivery at m.140 per 100 kilos.

BALSAM PERU is quoted at m.21 per kilo.

BOIC ACID is only obtainable in very small quantities; the demand is very active, and m.240 has been paid for powder.

CAMPHOR is extremely scarce, refined Japanese being unobtainable; a few parcels of 100 kilos. of refined bells are to be had at m.775. Synthetic is offered at m.700.

CASCARA SAGRADA is quiet at m.160 to m.170.

CEVADILLA is quiet at from m.165 to m.170 per 100 kilos. CYTRIC ACID.—The demand is very active, but makers only sell small lots at from m.11.50 to m.12 per kilo.

CLOVES.—Zanzibar are active; the importation has come to a full stop, however, so that only small quantities are available at m.300 to m.310.

MASTICH is quoted at m.8.50 per kilo.

OILS (ESSENTIAL). Russian *Anise*, which has been neglected of late, is now in better demand at from m.26 to m.23 per kilo. *Star-anise* is offered at m.14. *Bergamot* is very difficult to obtain, and consequently prices are high at from m.40 to m.42 per kilo. for genuine. Dutch *Caraway* steadily advances in price, and this, combined with the high value of the florin, has caused an advance of about 20 per cent. in the oil in Germany, which is quoted at from m.16 to m.17 per kilo. *Cassia* is still obtainable at from m.9 to m.10 per kilo. *Clove* is cheaper at m.18. *Eucalyptus globulus* meets with more interest at m.5.25. The demand for *Fennel* has fallen off, but prices are not expected to become lower as no seed from Galicia and Poland will be imported into Germany now. From m.22 to m.24 per kilo. is quoted. Ceylon *Lemongrass* is to be had at m.6.50 per kilo., but Java is higher and in good demand at from m.12.50 to m.13. *Lime* is cheaper at m.18. *Menthol* is firmer; rather large quantities have been bought at the low prices at which the article was offered, but it is not now obtainable below m.51. *Peppermint oil* is firm. Japanese is quoted at m.12.75 per kilo.; H.G.H. is m.22 per lb.; and Wayne-County m.38 per lb. Paraguayan *petitgrain* is to be had at m.29. Siberian *Pine-needle oil* has advanced to m.4.20 per kilo. in consequence of large quantities having been sold.

OILS (FIXED AND FATS). *Cod-liver* is very firm and active. First non-congealing steam-refined oil is quoted at m.335; first natural Bergen at m.265; yellow Bergen, m.285; whale oil, No. 0 to 1, m.325; *herring oil*, m.330 per 100 kilos. Norwegian quotations are higher than those in Hamburg. Most of the German oil-mills have stopped business in consequence of lack of oil-seeds, so that the small quantities of food-oil that are offered meet with a ready sale at extremely high prices. *Eartheni* has been sold at from m.350 to m.365 per 100 kilos. *Linseed oil* has almost disappeared from the inland markets, as linseed belongs to the "commandeered" articles and the use of linseed oil in paints is prohibited. The last quotations were from m.360 to m.370, and from m.370 to m.375 for boiled oil. *Olive oil* of all qualities is very scarce, and as the demand remains active prices have considerably increased at from m.380 to m.390 for finest Nice oil; m.350 to m.355 for fine Nice oil; m.330 to m.340 for fine oil for cosmetic purposes; from m.300 to m.310 for ordinary qualities. *Poppysced* and crude *Rapeseed oils* are unobtainable in consequence of seed being commandeered. Refined *Rapeseed oil* is still to be had in small quantities at from m.310 to m.320. *Sesame* is quoted at from m.340 to m.350.



Insurance Dispensing.

Fairplay (38/45), writing from Exeter, states that persons or firms who contracted under the National Insurance Act for the supply of appliances only are sending in notices to terminate their contracts for the ensuing year. Would it not be as well, he asks, for chemists to send in notices terminating their contracts in so far as appliances are concerned? By so doing, he thinks, they would bring to the Commissioners' notice in a very effective way the gross injustice of the 0.8d. establishment charge for appliances irrespective of their value.

Mr. Edgar M. Chapman (Scarborough) writes, as a member of the North Riding of Yorkshire Pharmaceutical Committee, to protest against the suppression of opinion on this matter by our Bloomsbury contemporary. He maintains that if the discounting clause had been retained, together with the old Tariff, revised, a very large majority of the panel chemists would have been better off than under the proposed terms, and only those areas whose discounting amounted to over 25 per cent. would have been any worse off. He understands that the discounted areas in 1913 were 35 out of 126, and if we say 18 were over 25 per cent. we should be near the mark. Now 85 per cent. of panel chemists are to be penalised for the remaining 15. Surely some scheme could have been devised to bring their payments at least up to the present Tariff if discounted by means of a small levy to a Central Fund, as suggested by the Scottish chemists. Mr. Chapman refers to the financial provisions generally and to Pharmaceutical Committees' expenses, which, he says, chemists can only obtain by means of a compulsory *pro-rata* levy from the miserable profit allowed under the new Tariff. He concludes by strongly recommending every panel chemist in non-discounted areas and areas where their discounting was less than 25 per cent., upon receipt of the terms of service, if organised opposition is contemplated, to place his written and signed refusal to continue on the panel at the disposal of his Committee, provided the opposition is unanimous. If no organised opposition is attempted, the chemist to send a personal protest to his Insurance Committee against the inadequate remuneration offered by the present Tariff, and saying that he is continuing for another year under protest.

SIR.—Before chemists decide to take the final step it would be advisable to study further the proposed Tariff. It is clear that the Commissioners have used the discounting clause and the desire of the trade to do away with repeats as a strong lever in securing very reduced terms of service. The maximum discount is 15 per cent. The new Tariff deprives panel chemists of 20 per cent. and leaves the abolition of repeats doubtful (*vide* No. 1 order, the bracketed portion, orders for drugs and appliances). Most will agree that the dispensing-fees in force at present are not what were desired, and are far from satisfactory; in many instances they were only accepted under protest with a view to upward revision. The acceptance of the new Tariff brings us face to face with a most serious position, for not only are drug profits disallowed, but the fees are in some cases actually lower than at present. The following contrasts, embracing medicaments in most frequent and general daily use, will enable us to take in the facts at a glance:

| | 1916 | 1915 |
|-----------------------------|------|-----------|
| Mixtures, lotions, etc. ... | 2.8 | 2.0-3.0 |
| Ointments ... | 3.6 | 3.0-6.0 |
| Powders (6) ... | 3.2 | 2.0-2.0 |
| Powders (12) ... | 4.4 | 3.0-3.0 |
| Pills (24) ... | 5.6 | 4.0-4.0 |
| Pills (over 24) ... | 1.2 | 2.0-2.0 |
| | 20.8 | 16.0-20.0 |

The new fees for the above four classes of medicaments amount to 20.8d.; the 1915 Tariff fees are a minimum of 16d. and a maximum for quantity of 20d. The new dispensing charge (Part I. Clause 3) includes (not additional) an establishment charge of 0.8d., which charge is supposed to be enough to cover outgoings in connection with the work. Subtracting this establishment charge from the above fees, we find that "the real remuneration in respect of professional services" is a trifle lower than that which we now obtain. In addition to this loss there is the abolition of night fees, or after-hour calls, where these have been

allowed—in effect a twenty-four hours' service. It is, however, when we come to appliances that the case becomes insupportable. There is no profit, the price being fixed by a net wholesale list. Only that part of the dispensing-fee called the establishment charge, which stands at 0.8*d.*, is allowed, the same charge only being allowed for a bandage at 1*d.*, a splint at 8*d.*, or an ice-bag at 2*s.* The cash necessary to purchase these appliances, the labour or time involved in supplying these things, is to receive "adequate remuneration" at 0.8*d.*, a time—3*d.*, per week; perhaps in some cases per month, for it is understood that the panel chemist agrees to carry the stock. Mr. Editor, we do not ask for fame, but we do ask for adequate remuneration from a corrected standpoint, and we have reason on our side. It is surely reasonable to demand that if profits are taken away with one hand in order to have a cost-price Tariff, sufficient fees should be given with the other to recoup against loss and under-payment. This unfair scheme should not have received the support of the Conference; one cannot believe that the delegates sufficiently grasped the facts of the case. One cannot but feel that our leaders on this occasion have not had the considered judgment of determined men to enable them to say, "We will do your work, but we will be paid a proper and sufficient remuneration."

Yours very truly,

Colwyn Bay.

JOSEPH W. ADAMSON.

Exportation of Proprietary Medicines

SIR,—It does not appear to be generally known among the makers of patent medicines and similar preparations that the Customs have recently introduced (without any warning, of course) a rule that none of these articles may be shipped abroad without a specific declaration of their exact composition. It follows that for the time being the export trade in patents will be brought to a standstill, as it is not to be supposed that makers will give away their secrets without objections, and from past experience I foresee that the shipper will be expected to argue the question (quite uselessly) before anything will be done. The Customs concede, however, that in the event of the manufacturer desiring to keep his secrets he may inform the War Trade Department, in confidence, of his formulae, and they will, after examination, decide whether or not the article may be exported without licence. Proprietors of all sorts of patents will therefore, in their own interests, do well to put through the necessary formalities without a moment's delay, and see that the Customs are advised of the result. There is reason to believe that many patents actually contain prohibited or restricted ingredients, but makers have silenced their own consciences by the reflection that the quantities are too small to matter. This consolation will no longer serve, and, although it savours rather of taking a steam-hammer to crush a butterfly, such makers should immediately apply for general licences to avoid an enormous amount of trouble, delay, and loss of trade. As to the practicability of the new Regulation, I have my doubts, and so, I gather, have some of the officials whose duty it is to enforce it. Meanwhile we long-suffering shippers and manufacturers can only grin and bear it.

Yours faithfully,

59 Mark Lane, E.C.

SYDNEY J. TAYLER.

Chemists and Recruiting.

SIR,—In continuing the above discussion in your widely read journal, may I say that I am threatened with the loss of my only reliable assistant, and at my age, when I am conscious of failing powers, the only outlook for me is to refuse to take on Insurance Act work. With regard to my assistant, who is under treatment for tuberculosis trouble, and, as everybody who knows him certifies, he is far less active than he used to be, and, although personally known to the recruiting agents, they are worrying him to join up, and now refer him to the local recruiting medical officer for examination. One hears enough of some of these gentlemen through customers whose husbands and sons have been under their treatment. Why cannot the certificate of a specialist who is appointed by the county be quite sufficient, as he has a responsible position under the Insurance Act? The assistant is a married man and refuses to be subjected to the overhauling of the medical officer under the recruiting agency. Is there any compulsion to attend?—Yours truly,

ANXIOUS. (37/6.)

[Compulsory recruiting for military service has not yet been legalised.—EDITOR *C. & D.*]

Apothecaries' Assistants "on a Good Egg"

Mr. F. E. Trayner, Hon. Secretary of the Association of Certified Dispensers, takes exception to the remark by "Xrayser II." last week to the effect that "Legally qualified pharmacists . . . must be careful not to give a handle to those insidious focs of the craft who are using the present occasion to force on the Pharmaceutical

Society the formulation of the by-laws referred to in Section 4 (b) of the Poisons and Pharmacy Act, 1908." Mr. Trayner states that the opportunity has been recognised at its true value and acted upon, and that the authorities concerned have been placed in possession of important and material facts with especial relation to the advisability of compelling the Pharmaceutical Society to discharge its constitutional obligations under an Act of Parliament. The persons indicated in the Act are fully cognisant of the fact that they are "on a good egg," and their determination was never stronger than it is to-day.

Subscribers' Symposium.

For interchange of opinion among "C. & D." readers, and brief notes on business and practical topics, especially new ideas.

More Appreciation.

A *Bedfordshire Pharmacist* (64/32), sending his subscription to the *C. & D.* for twelve months, says: "I have tried a substitute, but find it absolutely useless for trade. Let me have the first possible issue."

Malt and Oil.

"The small retailer is finding it increasingly difficult in competing with the multiple-shop companies, not so much in prices, but in containers. At the moment malt and oil is being retailed in large pots (their own words) at 1*s.* 10*d.* The package is got up to look larger than the 2-lb., which has become the recognised selling-line in the trade. Is there no firm of wholesale chemists wide enough awake to put a similar package on the market so that we can compete? At the present prices 2*s.* 3*d.* is only a fair price for a 2-lb. jar, yet customers draw attention to So-and-So's large bottle at 1*s.* 10*d.*"—*Fair Play*. [See editorial note on p. 50.]

A Juvenile View.

Subjoined is an untouched sketch by C. Felix Bayley, son of Mr. Cornelius Bayley, pharmacist, Uppingham. He has recently entered his teens, but it will be noted that he keeps his eyes open.



Chemist. Owing to the Budget, Madam, the price of B—s Pills is raised from 10½*d.* to 1*s.*

Old Lady. Well, all I can say on the subject is that that Kaiser Bill wants 'anging, 'e docs. 'E's raised the price of my sugar and tea, and now 'e's gone and helevated the price of pills.

Making the Best of It.

Canuck (36/54) writes a cheery letter about his experience of early closing. When he started in business in a Welsh town twenty years ago there were three other chemists in the place (two now), and the hours were 8 A.M. to 9 P.M., except up to 12 P.M. on Saturdays. A few years later the chemists agreed to close at 8 P.M., but that soon fell through and 8.30 was adopted, gradually working it to 8 P.M. When the Shops Act was put in force, "Canuck" closed at 7.30 P.M. for the first three nights, and 9 P.M. Fridays and 10 P.M. Saturdays, in line with the other trades for those two days. He used to have a good many calls after closing, but, he adds, "as they were generally patents and the like, I got disgusted and refused to answer the door. I have never opened on Sundays, nor after once closing at 1 P.M. on the early-closing day (Thursday). I have found business to improve all the time, and I now close for the dinner-hour without feeling any ill-effects. With regard to the apprentice scarcity, I have lately taken in two girls as such, and find it answer very satisfactorily. I have come to the conclusion that it is best to paddle your own canoe, and not let the public do it for you, and not worry about your neighbour's method of business, but let him do it himself. I hope this may induce some timid ones to make a move to release themselves from some of our slavish customs."

Legal Queries.

The majority of difficulties in regard to trade law are explained in the legal section of "The Chemist and Druggist Diary," 1915, beginning on page 405.

E. B. (34/70) has a medical customer, who orders 10-per-cent. solution of iodine to be made with industrial methylated spirit, and he wants to know if it is legal to supply this. [It is illegal to make or to sell such a preparation, unless the permission of the Commissioners of Customs and Excise has been obtained by the maker or vendor.]

Quandary (34/63) wants to know if it is legal to transfer a stamp or stamps from a stamped medicine not made or put up by himself, which is in the vendor's possession, to another article. [Section 11 of the Medicine Stamp Act, 1802, is designed to prevent stamps being used over again, and Sections 13 and 14 of the same Act provide fines of 20*l.* (1) for using a stamp a second time, and (2) for selling or buying stamps for the purpose of being used a second time, or selling any packet with such a stamp upon it.]

R. J. G. (36/69).—Your label is peculiar. The Revenue authorities consider that such a description as "Lung Balsam" brings a medicine within the charge of duty; in your case the description is "Balsam of So-and-so; Lung-mixture," and this we think may be regarded by the authorities as an ostensible holding-out in the terms of their ruling. You should send two copies of the label to the Secretary (Excise), Board of Customs and Excise, Custom House, London, E.C., in order that it may be marked officially.

Miscellaneous Inquiries.

We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas of them. When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for and how.

We do not as a rule repeat information which has been given in this section during the past twelve months, but give the reference to the issues in which the information may be found. If querists cannot refer to these they may obtain the numbers from the "C. & D." Office at the published price, usually 6*d.*

A. W. P. (247/19).—The cheapest way To CLEAN OUT TINS which have contained tar and varnish is with a hot solution of caustic soda (about 1 in 20). Before doing this the tins should be heated, and as much of the resinous matter as possible liquefied and removed. The cost in materials and time of cleaning the tins will perhaps be more than they are worth.

Soda-lime (264/40).—SODA-LIME is made by slaking quicklime with a solution of caustic soda (5 per cent.), drying the mixture when cold, and reducing to fine powder. This is used for analytical purposes, and should not be confused with LONDON PASTE (soda and lime), which is a mixture of powdered caustic soda and slaked lime. See "Pharmaceutical Formulas," p. 34.

H. C. C. (13/7).—(1) REAGENTS FOR DETECTING ALKALOIDS.—The two reagents for alkaloids referred to in Mr. Parry's paper on "Testing for Poisoned Water" are:

Dragendorff's Reagent

(Solution of Potassio-bismuth Iodide).

This is best made by Thresh's method, which consists of mixing 16 volumes of liq. bismuth., B.P., with 1 volume of hydrochloric acid (sp. gr. 1.16), and adding potassium iodide equal in weight to the hydrochloric acid.

Scheibler's Reagent

(Solution of Phospho-tungstic Acid).

| | |
|-------------------------|----------------|
| Sodium tungstate | 100 parts |
| Sodium phosphate | 60 to 80 parts |
| Water | 500 parts |

Dissolve and add—

Nitric acid q.s.

to give an acid reaction.

(2) BOOK ON FOOD-ANALYSIS.—Moor and Partridge's "Aids to the Analysis of Food and Drugs" (Baillière, 3*s.* 6*d.*). (3) BOOK ON BACTERIOLOGY.—Hewlett's "Manual of Bacteriology" (Churchill, 12*s.*).

Downpatrick (12/34).—Methylated spirit is employed for cleaning mica.

T. N. B. (Lahore) (250/33).—MANUFACTURE OF ANILINE DYES.—There is no journal published dealing mainly with the manufacture of aniline dyes. The fundamentals of this branch of industrial chemistry are obtained from the study of text-books (see *C. & D.*, July 3, p. 64), and this knowledge is enlarged by a close study of patent-specifications. Abstracts of dye patents are published in the "Journal of the Society of Chemical Industry" which appears fortnightly.

W. W. (19/70).—BOOKS ON PARALYSIS.—Chase's "General Paresis" (8*s.*, 1902); Tubby and Jones's "Modern Methods in the Surgery of Paralysis" (10*s.*, 1903); Williamson's "Paralysis Agitans" (3*s.* 6*d.*, 1901).

Wales (27/40).—THUJA OIL is obtained from *Thuja occidentalis*, L., the yield being from 0.5 to 1 per cent. It has been employed as a remedy for worms, although the tincture or fluid extract is more usually the form in which the herb is administered.

K. B. (Egypt) (26/11).—The export of aniline salts from the United Kingdom is at present prohibited to all destinations.

J. R. V. (20/15).—ONE-SOLUTION HAIR-DYE.—See *C. & D.*, July 10, p. 58.

Phosphate (26/13).—(1) SCHWEITZER'S REAGENT for dissolving cotton, silk, and linen when mixed with wool is a saturated solution of freshly precipitated copper hydroxide in concentrated ammonia solution. It is made as follows:

Dissolve 10 grams of copper sulphate in 100 c.c. of water and add 5 grams of potassium hydrate dissolved in 50 c.c. of water. The precipitate is collected, washed with water, and pressed dry, then macerated with constant shaking for a day with 20 grams of 20-per-cent. ammonia solution.

(2) WATERPROOFING FABRICS.—The only book on this subject with which we are acquainted is Mierzinski's "Waterproofing of Fabrics" (Scott, Greenwood, 5*s.*).

Smilax (16/12).—FULLERS'-EARTH CREAM.—To prepare this smoothness must be the chief consideration, as the cream is applied to excoriated skin. The fullers' earth should be elutriated and dried, then mixed with a basis of vaseline and lanoline in one of the modern ointment-mills.

Chiropody (22/43).—BOOKS ON CHIROPODY.—See *C. & D.*, February 13, p. 64.

S. C. M. (29/7).—PICRIC-ACID SOLUTION FOR CHILBLAINS.—Dissolve 8 gr. of the acid in an ounce of distilled water.

Dispenser (29/65).—If you desire to distil the essential oil from garlic (*Allium sativum*), use with the fresh plant about four times its weight of water, and have a false bottom in your still. The yield is small, varying from about 1 oz. to 3 oz. from 1 cwt. of garlic, and it would be preferable to use even less water and a current of steam.

Retrospect of Fifty Years Ago.

Reprinted from "The Chemist and Druggist," Nov. 15, 1865.

Revi. ws.

MODERN CHEMISTRY.

Introduction to Modern Chemistry, Experimental and Theoretic. Embodying Twelve Lectures delivered at the Royal College of Chemistry, London. By A. W. HOFMANN, LL.D., F.R.S., V.P.C.S., etc. (Walton & Maberly.) Pp. xv+253. Price 4*s.* 6*d.*

A Course of Practical Chemistry, arranged for the Use of Medical Students. By WILLIAM ODLING, M.B., F.R.S., etc. Second Edition. (Longmans, Green & Co.) Pp. x+241. Price 7*s.* 6*d.*

A Dictionary of Chemistry, etc. By HENRY WATTS, B.A., F.C.S. Parts xxx., xxxi., xxxii.: Palm Wax—Phosphorus. (Longmans, Green & Co.) 2*s.* 6*d.* each.

The three works named above promulgate the creed of our modern chemical philosophers—a creed which differs from that adopted as the basis of every popular text-book of chemistry almost as greatly as the astronomical system of Copernicus differs from that of Ptolemy. The chemistry taught in most of our schools is not the chemistry accepted by the teachers. A student may thoroughly master his "Fownes," his "Graham," or his "Brande," but still be unable to comprehend the esoteric notation employed in papers read before the Chemical and Royal Societies. This state of things cannot last much longer. . . . In plain English, the beautiful electro-chemical theory is quite inadequate to explain chemical phenomena, and has already been discarded by the great chemists of all countries.

PEARS

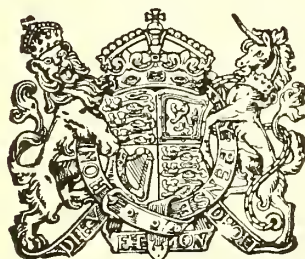


KING GEORGE V.

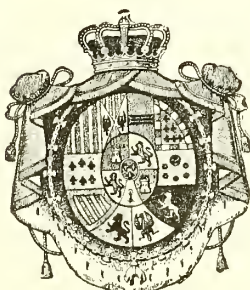
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| Argent. Colloidale | Collargol | Ichthyol |
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| Benzoylnart-Thymicobenzoic | Pyrenol | Methylacetanilid |
| Cotarnine Hydrochloride | Stypticin | Methylenditannin |
| Chinin Carbonic | Aristochin | Metoxymethyl Salicylic |
| Diacetyltannin | Tannigen | Methyl-amino-oxybenzoate |
| Diethylbarbituric Acid | Veronal | Natr. Diethylbarbituric |
| Di-thymol Iodide | Aristol | Natr. Methylarsenic |
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| Glycin (Para-oxyphenylglycoll) | The chemical equivalent sold under the name of Rodinal |
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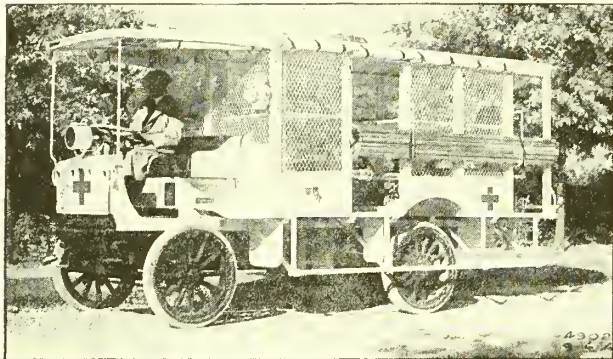
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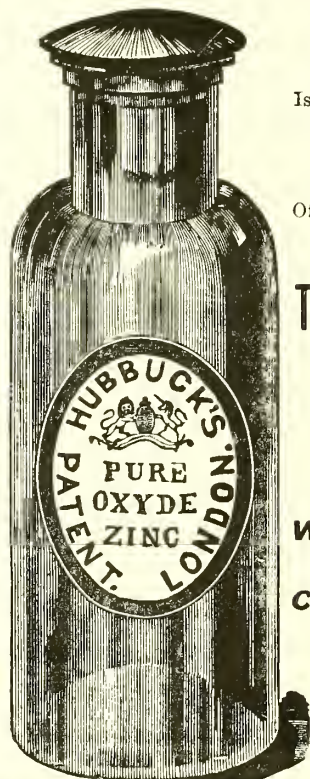
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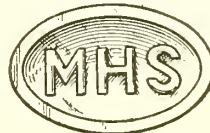
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- " Acetylo-Salicyl. 1 lb. @ 52/6 lb.
- " Benz, B.P., 7 lbs. @ 12/- lb.; 1 lb. @ 12/6 lb.
- " Boric Pulv., 3 cwt. @ 46/9 cwt.; 1 cwt. @ 47/3 cwt.; levig. 3/- cwt. or 1/4 lb. extra.
- " Casbol. Kiba., 39/40; 5 lb. drums @ 2/1 lb.; 12 1-lb. Bots. @ 2/4 lb.; Single Bots. @ 2/6 lb.; Detached Cryst. 1 lb. @ 2/8 lb.; Crude Black, 45 gall. casks @ 1/- gal.; 5 gall. drums @ 1/6 gall.; 1 gall. tins @ 1/11 each.
- " Citric, cryst., B.P., 85, 7 lbs. in bags @ 3/3 lb.; powder 1/4 lb. extra.
- " Diethylbarbituric, 1 oz. @ 3/6 oz.
- " Gallic, pus., P.B., 7 lbs. @ 4/3 lb.; 1 lb. @ 4/6 lb.
- " Hydrochlor. Coml., cases of 4 2-gal. jars, 26 6 each; 20 case lots @ 25/6 each.
- " Hydrocyan. P.B., 6 lbs. @ 1/7 lb.; 1 lb. @ 1/10 lb.; 36 1-oz. Vials @ 6/6 doz.
- " Oxalic Cryst., 1 cwt. @ 1/2 1/2 lb.; 14 lbs. @ 1/3 1/2 lb.
- " Phosph. Dil., B.P., 6 lbs. @ 5d. lb.
- " Salicyl. pulv. 1 lb. @ 18/9 lb.
- " Sulphur, Coml., cases, 4 2-gal. jars 30/- each; 20 cases @ 29/6 each.
- " Sulph. Aromat. B.P., 5 lbs. @ 4/- lb.
- " Tannic, B.P., 1 lb. @ 5/1 lb.
- " Tart., cryst. or pulv. B.P., 1885, 7 lbs. @ 2/8 lb.; parv. 1/4 lb. extra.
- A**deps Benz., B.P., 28 lbs. @ 9 1/2 d. lb.; 7 lbs. @ 10 1/4 d. lb.
- A**ergo Æris Pulv., 14 lbs. @ 11d. lb.
- A**loea Barb., English ground, 28 lbs. @ 120/- cwt.; 7 lbs. @ 1/3 lb.
- A**loes, Scot. 7 lbs. @ 1/5 lb.; powder, 7 lbs. @ 1/6 lb.
- A**loin, B.P., 1 lb. @ 5/6 lb.
- A**mon. Benz. 7 lbs. @ 12/- lb.; 1 lb. @ 12/6 lb.
- A**mon. Brom. P.B., 1 lb. @ 17/9 lb.
- A**mon. Carb. lump, 3 cwt. @ 5 1/2 d. lb.; 28 lbs. @ 7d. lb.; 7 lbs. @ 7 1/4 d. lb.; powder, 1/4 lb. extra.
- A**mon. Chlor., 99% pulv., 1 cwt. @ 50/- cwt.; 7 lbs. @ 1/4 d. lb.; Patteties, 4/- cwt. extra.
- A**myll Pulv., 10 cwt. @ 16/- cwt.; 2 1/2 cwt. @ 16/8 cwt.; 1 cwt. @ 18/6 cwt.
- A**nseed, English ground, 1 cwt. @ 54/- cwt.; 7 lbs. @ 6 1/2 d. lb.
- A**nth. Nig. Pulv., 1 cwt. @ 84/- cwt.; 14 lbs. @ 89/- cwt.
- A**ntim. Tart. pulv. 7 lbs. @ 4/2 lb.
- A**plol, 1 lb. @ 29/- lb.
- A**qua Anetbi Conc. 1-40, 1 lb. @ 3/2 lb.
- " Anstl Conc. 1-40, 1 lb. @ 3/4 lb.
- " Aurant. Conc. 1-40, 1 lb. @ 6/4 lb.
- " Aurant. Trip., 6 lbs. @ 8d. lb.; 53 lbs. for 23/-
- " Cinna. Conc. 1-40, 1 lb. @ 3/7 lb.
- " Cinnacrosal, 6 lbs. @ 8d. lb.
- " Menth. Pip. Conc., 1-40, 1 lb. @ 3/3 lb.
- " Rosa Conc. 1-40, 1 lb. @ 7/3 lb.
- " Rosa Trip., 53 lbs. for 25/-, 6 lbs. @ 8d. lb.
- " Samb. Conc., 1-40, 1 lb. @ 6/4 lb.
- " Samb. Trip., 6 lbs. @ 8d. lb.
- A**zaroeba, fine powder, 7 lbs. @ 8/- lb.; 1 lb. @ 8/6 lb.
- A**rgent. Nit., 6's to oz., 25 oz. @ 1/10 1/2 oz.; 1 oz. @ 2/1 oz.
- A**rgent. Nit., Cryst., 25 oz. @ 1/9 oz.; 8 oz. @ 1/10 oz.
- A**rsenic. Alb. Pulv., 2 cwt. @ 39/- cwt.; 7 lbs. @ 5d. lb.
- A**tropinæ Sulph., P.B., 1 oz. @ 122/6 oz.
- A**uri Chlor., 6 doz. 15 gr. tubes @ 21/3 doz.; 1 doz. 15 gr. tubes @ 21/6 doz.
- B**ala. Copalba, pure, 4 lbs @ 1/10 lb.; 9 lbs. @ 2/1 lb.; 1 lb. @ 2/5.
- " Peruv., P.B., 1 lb. @ 20/- lb.
- " Sulphur, 7 lbs. @ 9d. lb.
- " Tolut. B.P., 50 lbs. @ 2/3 lb.; 1 lb. @ 3/1 lb.
- B**ismuth, P.B., Carb., 3 lbs. @ 17/- lb.; 1 lb. @ 17/6 lb. submt. same price.
- B**oracic Mixture, 1 cwt. @ 52/6 cwt.
- B**orax, 1 cwt. @ 26/6; powder 1/- extra.
- B**utyl-Chloral Hydras., P.B., 1 lb. @ 45/- lb.
- C**affeine, P.B., 1 lb. @ 30/- lb.
- " Caffeina Cit., B.P., 1 lb. @ 18/6 lb.
- C**alamina, powder, fine pink, 5 cwt @ 11/6 cwt.; 1 cwt. @ 12/6 cwt.; 7 lbs. @ 2d. lb.
- C**alamine, B.P., 1885, 7 lbs. @ 1/2 lb.
- C**alcil Carb. Precip., 5 cwt. @ 14/6 cwt.; 1 cwt. @ 18/6 cwt.; 28 lbs. @ 22/6 cwt.
- " Hydras., P.B., 1 cwt. @ 25/- cwt.; 7 lbs. @ 5d. lb.
- " Hypophosph. Pur., P.B., 1 lb. @ 2/5 lb.
- " Iodid., 1 lb. @ 25/- lb.
- C**ampbor, English Flowers, "not artificial," 5 lbs. @ 2/5 lb.; 1/2 oz. or 1/4 oz. 7 lbs @ 2/4 lb.; good white, about 5% as imported, 140 lbs. @ 1/9 1/2 lb.; 28 lbs. @ 1/10 1/2 lb.
- C**antbarides, Russian, 7 lbs. @ 1/- lb.; powder 6 1/2 lb. extra.
- C**apsicine, solutle, 1 lb. @ 9/6 lb.
- C**arbo Animalis or Lianl, powder or lump, 1 cwt. @ 25/- cwt.; 28 lbs. @ 3 1/2 lb.
- C**ardamoms, 28 lbs. @ 4/3 lb.; 7 lbs. @ 4/6 lb.
- C**armine, Finest 1 lb. @ 25/- lb.; No. 2, 1 lb. @ 20/- lb.
- C**era Alba, B.P., White Moon, 28 lbs. @ 2/5 lb.; 4 lbs. @ 2/7 lb.; Flav. 1 lb. Blocks, 28 lbs. @ 1/9 1/2 lb.; 4 lbs. @ 1/10 1/2 lb.; 1 oz. 1/2 oz. tabs., 7 lbs. @ 1/10 1/2 lb.
- C**eril Oxalas, 7 lbs. @ 5/6 lb.
- C**etaceum, No. 1, fine white, 64 lbs. @ 11d. lb.; 7 lbs @ 1/1 lb.; powder, 7 lbs. @ 1/6 lb.; Chloral Hydras Cryst., B.P., 7 lbs. @ 14/- lb.; 1 lb. @ 14/6 lb.
- C**hlorodyne, 5 lbs. @ 2/3 lb.
- " Chloroform, pure, B.P., 12 8-lbs. @ 2/2 lb.; 8 lbs. @ 2/3 lb.; 6 1-lb. bots. @ 2/6 lb.
- C**ocaine Hydrochlor., B.P., 25 ozs. @ 13/4 oz.; 4 oz. @ 14/6; 1 oz. @ 15/3 oz.
- C**odeina, 1 oz. @ 25/6 oz., Phosph., 1 oz. @ 21/- oz.; Hydrochlor. or Sulph. 1 oz. @ 22/- oz.
- C**olocynth, Apple, English ground, 1 cwt. @ 1/4 lb.; 28 lbs. @ 1/5 lb.; 7 lbs. @ 1/7 lb.
- C**omposition Powder (Coffin's), 1 cwt. @ 62/- cwt.; 7 lbs. @ 8d. lb.
- C**onf. Senna, P.B., 14 lbs. @ 11 1/4 d. lb.; 7 lbs. @ 1/0 1/4 lb.
- C**ort. Aurant. Exot. Sbreds, 7 lbs. @ 2/4 lb.
- " Cinchon. Rub. (Quill), 7 lbs. @ 1/1 lb.
- " Ulmi Fulva, Pulv., 1 cwt. @ 11d. lb.; 7 lbs. @ 1/1 lb.
- C**ream of Tartar, 98% powder, 1 cwt. @ 195/- cwt.; 7 lbs. @ 1/11 lb.
- C**reasote, Beechwood, P.B., 7 lbs. @ 9/- lb.
- C**reta c. Campb., 7 lbs. @ 9d. lb.
- " Gall. Pulv., in sacks 10 cwt. @ 7/9 cwt.; 1 cwt. @ 9/3 cwt.; 14 lbs. @ 1 1/4 d. lb.
- " Præparata, 7 lbs. in box @ 1/- each.
- C**ubeba, English Ground, 28 lbs. @ 2/3 lb.; 7 lbs. @ 2/4 lb.
- D**ec. Aloes Co. Conc. 1-2, 6 lbs. @ 2/1 lb.; Sinecroco, 6 lbs. @ 1/3 lb.
- " Cinchonæ (Rubræ) Conc., 1-7, 6 lbs. @ 2/- lb.
- " Senega Conc., 6 lbs. @ 2/3 lb.
- E**mp. Spread, 12 yards x 16 ins. adhesive, 4/-; B-lad. B.P.C., Green @ 19/3; Coeat. Saponis @ 8/3; Picis Co. @ 8/3; Plumbi @ 6/8; Resinæ @ 4/11; Roborans @ 7/9; Saponis, B.P., @ 6/8.
- E**mp Picis, P.B., 7 lbs. @ 1/4 d. lb.
- " Plumbl, P.B., 7 lbs. @ 1 d. lb.
- " Resinæ, P.B., 7 lbs. @ 1/4 d. lb.
- " Roborans, 7 lbs. @ Od. lb.
- E**mulsio Ol. Morruba, 5 lbs. @ 1/4 lb.
- E**serine Sulph., in 15-grain tubes, 7/- each.
- E**ss. Bergam. (Oil), 12 lbs. @ 13/- lb.; 1 lb. @ 14/- lb.; not guaranteed absolutely pure.
- E**ss. Limonis (oil) original coppers, 12 lbs. @ 4 1/2 lb.; 6 1-lb. bots. @ 4/9 lb.; not guaranteed absolutely pure.
- E**ss. Moschi (not artificial), 5 lbs. @ 12/6 lb.; 1 lb. @ 13/3 lb.
- E**ss. Pear (artificial), Jargonelle, 5 lbs. @ 2/6 lb.; Bergamot. 3/- lb.
- E**ss. Pineapple, 5 lbs. @ 4/- lb.
- E**ss. Raspberry, 5 lbs. @ 2/8 lb.; 1 lb. @ 3/- lb.
- " Vanilla Beans, 5 lbs. @ 4/6 lb.; 1 lb. @ 4/9 lb.
- E**xt. Belladonna Liq., B.P., 5 lbs @ 13/9 lb. 1 lb. @ 14/3 lb.; solid, 7 lbs. @ 7/10 lb.
- E**xt. Cannab. Ind., Alc., B.P., 1 lb @ 54/- lb.
- E**xt. Cascara Sag. Liq., B.P., 1 cwt. @ 1/6 lb.; 10 lbs. @ 1/8 1/2 lb.
- E**xt. Ergot. Liq. P.B., 5 lbs. @ 4/9 lb.; 1 lb. @ 5/3 lb.; Solid, P.B., 4 lbs. @ 25/- lb.; 1 lb. @ 26/6 lb.
- E**xt. Gent., P.B., solid, 1 cwt. @ 1/3 lb.; 7 lbs. @ 1/4 lb.
- E**xt. Glycyrrh. Liq., B.P., 6 lbs. @ 2/6 lb.
- E**xt. Hamamelis Liq., P.B., 5 lbs. @ 3/9 lb.
- E**xt. Hyoscyam., Solid, B.P., 3 lbs. @ 8/6 lb.; 1 lb @ 4/6 lb.
- E**xt. Ipecac. Liq., P.B., 5 lbs. @ 24/6 lb.; 1 lb. @ 2/6 lb.
- E**xt. Malti c. Ol. Jecoris, 10 lbs. @ 8 1/2 d. lb.
- E**xt. Nucis Vom. Liq., P.B., 5 lb. @ 4/- lb.; 1 lb. @ 4/3 lb.; solid, 5 lbs. @ 4.6 lb.; 1 lb. @ 5/ lb.
- E**xt. Opii Solid, P.B., 1 lb. @ 72/- lb.
- E**xt. Opii Liq., B.P., 5 lbs. @ 5/6 lb.; 1 lb. @ 6/- lb.
- E**xt. Quassia, Solid, 7 lbs. @ 7/6 lb.; 1 lb. @ 8/- lb.
- E**xt. Sarsæ Co. Solid, 7 lbs. @ 6/- lb.; 1 lb. @ 6/6 lb.
- F**erri Ammon. Cit., P.B., 28 lbs. @ 3/10 lb.; 7 lbs @ 4/- lb.
- F**erri Carb. 14 lbs. @ 5d. lb.
- F**erri et Quinina Cit., P.B., 100 oss. @ 11 1/4 d. oss.; 25 oss. @ 1/- oss.
- F**erri Sulph., pure cryst., 1 cwt. @ 17.6; 7 lbs. @ 3 1/4 lb.
- F**errum K-dact., 80%, 28 lbs. @ 3/11 lb.; 7 lbs. @ 4/3 lb.
- F**lor. Anui. Exot., 7 lbs. @ 1/4 lb.
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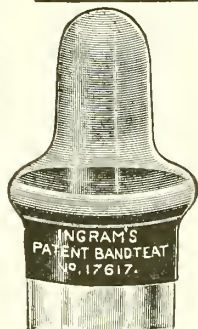
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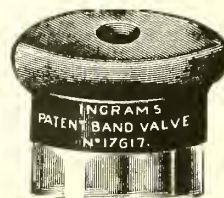
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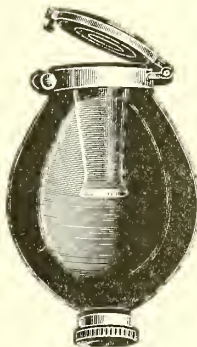
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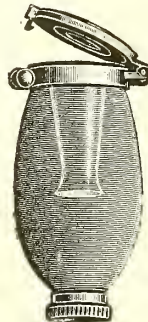
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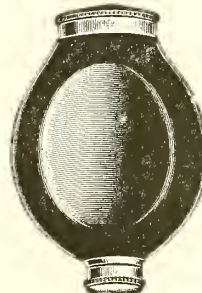
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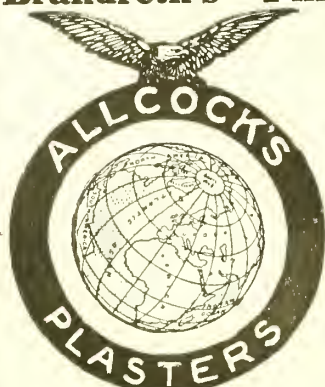
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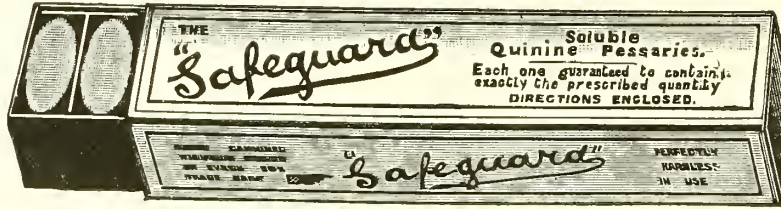
APPLY TO

THE ASIATIC PETROLEUM CO. LTD.

ST. HELEN'S COURT,
GREAT ST. HELEN'S
— (G.P.O. Box 602) —

LONDON. E.C.

SOLUBLE QUININE PESSARIES



The "SAFEGUARD" Pessaries (of which we are sole proprietors) are compounded according to a formula which experience has shown to be absolutely the best for the purpose. Nothing but the purest drugs being used in them, they never fail, and can be recommended to customers with the utmost confidence.

PRICES.

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| 1 Dozen in Box, with directions | ... | ... | ... | ... | ... | Per Dozen Boxes | £ | s. | d. |
| 1 " " in 3 Dozen lots | ... | ... | ... | ... | ... | " | 0 | 11 | 6 |
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Special Quotations to Shippers and Wholesale Dealers.

5% discount allowed for prompt cash off above prices. Carriage paid on Orders of £2 and upwards to any town in the United Kingdom.

We are the right House for **BRITISH-MADE GOODS**—Bandages, Belts, Catheters, Clinical Thermometers, Gombs, Enemas, Elastic Hosiery, Hot Water Bottles, Trusses, Splints, Water and Air Beds, Water and Air Cushions, Waterproof Sheetings, and every description of Rubber and Vulcanite Goods.

ILLUSTRATED PRICE LIST POST FREE. OUR GOODS ARE RIGHT. MONEY BACK IF NOT SATISFIED.

BURGE, WARREN & RIDGLEY, LTD.,
91 & 92 GREAT SAFFRON HILL, LONDON, E.C.

A. DE ST. DALMAS & CO.

Contractors to
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LEICESTER.

(Established 1828.)

— MANUFACTURERS OF —

MEDICAL PLASTERS

Spread Plasters. Adhesive, Belladonna, Soap Cerate, Roborans, Fleshcolour Adhesive, &c.

Hospital Strapping. On Holland, Pure Stout Calico, &c.

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Rubber Adhesive Plaster. On Cotton Cloth or Holland—In Tins or on Spools.

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SURGICAL BANDAGES

Waterdressing, Fastedge, Calico, and Flannel Bandages, Elastic Web, Crêpe Velpéau, and Plaster of Paris Bandages.

— **THE LEICESTER "VARICO" LEG BANDAGE.** —

TRADE MARK.

"SANOID" HOT WATER BOTTLE COVER.

(GERRARD'S PATENT).

WOOL - LINED
QUILTED
RETAIN THE HEAT



COMFORTABLE in USE
GIVE SATISFACTION
WEAR WELL

IN THREE COLOURS, PINK, RED AND BLUE.

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| 8×6 | 10×6 | 10×8 | 12×6 | 12×8 | 12×10 | 14×8 | 14×10 | 14×12 |
| 4/6 | 4/6 | 5/- | 5/- | 5/- | 6/6 | 6/6 | 7/6 | 7/6 doz. |

CUXSON, GERRARD & CO., LTD., OLDBURY



To H.M.
King George V.

By Royal Warrant

To H.M.
Queen Alexandra.



HOLDERS OF ROYAL WARRANTS DURING THREE SUCCESSIVE REIGNS.

Jeyes' Fluid

Best and Safest Disinfectant.

Jeyes' Parasitic Soap

(In metal boxes, 2/6 per doz.)

For destroying all body parasites in the trenches.
Prepared in accordance with Dr. Monckton Copeman's recommendation.

Jeysol

Identical in composition with original German
Lysol, and equally efficient.



Jeyes' Sanitary Compounds Co., Ltd., 64 Cannon Street, London, E.C.

FREDK. FINK & CO.,

10 & 11 MINCING LANE, LONDON, E.C.

SPECIALITIES.—Gums Arabic and Tragacanth as imported or finely powdered.**PRECIPITATED CHALK.**

Lightest and Whitest, also Purest Dense.

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AUG. LEVERMORE & CO. Ltd., 8-10 Gt. St. Helens, LONDON, E.C.

Telegrams: LEVERMORE LONDON. Telephone: 4613 Central.

HOT WATER BOTTLES.

BEST ENGLISH MAKE.

Before placing your season's order for Hot Water Bottles please write for quotation to

The GALEN MANFG. CO., Ltd., Wilson St., New Cross, London, S.E.

**CACHETS "FINOT"**

(White or Coloured),

With inscriptions in any desired tint; also Plain or Embossed.

"Beautifully made, and the inscriptions give them a distinction all their own."—C. & D.

"Perfection of Cachets"—Lancet.

These Cachets are especially adapted for Headache, Neuralgia, and other powders.
COOPER, SON & CO., Ltd., 80 Gloucester Road, SOUTH KENSINGTON.
In Ten Sizes. Also supplied to fit existing machines.**BURROW'S "ALPHA BRAND" MALVERN WATERS**

PROTECTION FROM TYPHOID

Address: W. & J. Burrow, Springs, Malvern.

Sheet Metal Work

in Brass, Copper, Zinc or Tinned Steel, for the Chemical Manufacturing Trades.

No matter what your requirements are, if it's a Sheet Metal job communicate with

A. GREEN & CO., 56/60 Chapel St., Salford, Manchester.**DISINFECTANTS OF ALL KINDS**

Cheapest Makers of Co-efficient Acids and Fluids.

HENRY ELLISON, LTD., CLECKHEATON, YORKS**S.V.M. WINES FOR CHEMISTS. S.V.R.****A. MACNAIR & CO.** Dolphin Distillery, Ardwick, MANCHESTER

IN CASES OF MALIGNANT DISEASE USE

EXT. ALNI LIQ. CONC.

MANUFACTURED BY

J. PRIMER, 302 ESSEX ROAD, LONDON, N.**Baines' Dielectric & Baines' Dielectric Emulsion**The newly discovered Dielectric Treatment for LOCAL PYREXIA in its various forms, including Pneumonia, Appendicitis, Neuritis, Rheumatoid Arthritis, etc. The greatest medical discovery of a century. All danger to life removed within a single hour in Pneumonia, Appendicitis, &c. This remedy is unequalled for rapidity of action in all forms of Local Pyrexia. Sold to the Medical Profession and Drug Trade only by **DEIONS, LTD.,** 220 Tower Bridge Road, London. 'Phone: Hop 335. Telegrams: "Deionisers, Bern, London."**Van Horn and Sawtell**

—LONDON AND NEW YORK—

MAKERS OF

"K-Y" LUBRICATING JELLY

IN COLLAPSIBLE TUBES AND OF

"Van Horn" Sterile Sutures and Ligatures

IN GLASS TUBES — PRICES ON APPLICATION

31 33 HIGH HOLBO N, W.C.

JOHN E. RAWORTH

CHARTERED PATENT AGENT,

PATENTS, TRADE MARKS AND DESIGNS.

THE OLD MANSION HOUSE, and QUEEN ANNE'S CHAMBERS, 73 Cheapside, E.C. WESTMINSTER, S.W.

Drop Bottles

L. H. and T. K. Patterns. 10, 15, 20, 30, 60 and 100 grm.

TELMA MANUFACTURING COMPANY,

Telma House, Red Lion Street, Clerkenwell Road, London, E.C.

Dentistry

FOR CHEMISTS & DENTISTS

Write for Price List

A.G. FENTIMAN

190, BISHOPSGATE, LONDON, E.C.

WANTED ALL BRITISH CHEMISTS

to send at once 3/6 postal order and they will receive carriage paid 1 GROSS NI-VERRE HAIR SHAMPOO, value 7/-. We allow you 3/6 for displaying our advertisement. A genuine offer; we know once you stock it you will repeat your order.

NI-VERRE CHEMICAL CO.,

5 to 7 Ormeau Avenue, BELFAST.

WILL VERNON & SONS**"Lister" Surgical Dressing Factory,**

NORTH ROAD, PRESTON.

MANUFACTURERS OF

Absorbent Lint, Cotton Wool, Bandages, Wood Wool, etc.

Telegrams: "SPINDLES PRESTON."



**ALEXANDRE'S
SHADEINE**
FOR COLOURING GREY HAIR.
This popular article is largely advertised and stocked by all Wholesale Houses.
TRIAL BOTTLES 6d. size supplied on pretty showcards, 4/6 doz : 1/- size, 10/- doz : 3/6 size, 30/- doz.
58 WESTBOURNE GROVE, LONDON, W.

NOTICE OF REMOVAL.
HERBERT M. LONGCROFT
(Formerly 10 Whitecross St., London, E.C.)
has removed to more convenient offices at
16 CLERKENWELL ROAD, LONDON, E.C.
to which address please send all inquiries for
BOTTLES AND GLASSWARE, CAP LUG BODIES, HIP BOXES, &c.
Please refer to page 420, Diary, 1916.

Send for Trade Price List of
MECHANICAL DENTISTRY
TO
TEMPLAR MALINS, LTD.,
51 Queen Street, CARDIFF.

E. CRAWSHAW & CO.,
56 Great Dover Street, S.E.
ANILINE DYE MERCHANTS,
are still selling their well-known Aniline Dyes to retail in Penny Packets.
Telephone : Hop 4992. Teleg. Address : "Cachous London."

TOBACCOS! CIGARS! CIGARETTES!
Every known Brand at Manufacturer's own List Prices. Endless variety of Tobacconists' Fancy Goods & Shop Fittings. The Trade only supplied. Opening orders a Speciality. Send for Price List.
SINGLETON & COLE, Ltd, Cannon Street, BIRMINGHAM, AND BRANCHES.

**SURGICAL
RUBBER & VULCANITE**
GOODS of every description.
CAVE & HIGGIN, LTD., 23 Hardman St., Deansgate, MANCHESTER.

SAVE TIME AND TROUBLE
by purchasing our 1d. and 2d. size Tins of
VASELINE, ZINC & BORACIC OINTMENTS, COLD CREAM, CAMPHOR ICE, &c. TOOTH POWDERS in all sizes.
Also supplied in Bulk
SPECIAL PRICES FOR THE WHOLESALE TRADE and CASH WITH ORDER CUSTOMERS Send inquiries to
LEVERS, 56 & 58 CHAPEL ST., MANCHESTER. Qual. Wholesale Chemists.

RUBBER & VULCANITE
Goods of every description. Waterproof Sheeting, Waterproof Aprons, Syringes, Enemas, Whirling Sprays, Air Cushions, Rubber Gloves, etc.
KEMP'S VULCANIZING CO., LTD.
19 Hardman Street, Manchester. Also at Sheffield.

CACHETS "PELTOT"
ALL SIZES 2/- per 1000 PLAIN OR EMBOSSED
Carriage Paid on orders of 5000. Write for Samples.
SOLE AGENT **CICERO S. CLARK,** Pharmacie Francaise, 12 Richmond Rd Westbourne Grove, London, W.

**FORMALDEHYDE 40%
SALICYLATES, U.S.P.**
SPOT DELIVERY.
Harry Heymann, 5 Union Street, Bradford.

ALL CHEMISTS SHOULD STOCK **ABDINE**
THE GOLD MEDAL FRUIT DRINK.
Quick Seller. Big Profits. Quarter of a Century's Reputation.
"ABDINE" is the most popular Health Drink. Superior to all Mineral Waters. Sold in 1d. Packets, and Boxes of 13 Packets at 1/-
Order through your Wholesale Drug House.
D. McGLASHAN, M.P.S., 12 West End Place, EDINBURGH.
Wholesale Prices on Application.

Up-to-date Chemists
Should see that their names are on the monthly mailing list for Christy's Monthly. In this leaflet many valuable suggestions together with intimation of new lines will be found. Let us send you this month's issue, post free.
CHRISTYS, OLD SWAN LANE, E.C.

WHOLESALE TRADE ONLY.
Established 1900.
DR. B. W. GATHERGOOD'S EXOR.
— Terrington St. John, WISBECH —
For **GREEN EXTRACTS** and **DRIED HERBS**
of **BELLADONNA, HENBANE, &c.**

HOBSON'S CELEBRATED BRITISH
SPRUCE BEER (also known as
Black Beer)

(NON-INTOXICATING).

A great restorative—builds up and strengthens
the whole system.

No licence required for its Sale.

**DANZOVIN** (registered) Malted Tonic Wine

(Retails at 1/6 per bottle)

MEAT AND MALT WINE

(with or without Quinine)

ORANGE QUININE WINE

(B. P.)



Write for samples and quotations to

JOSEPH HOBSON & SON,

Regent Street, LEEDS.

The original Black Beer Brewery, established a century.

REPUTATION!

attractively got up. They show you a good profit and bring you repeat orders.

PRICE LISTS ON APPLICATION. SPECIAL QUOTATIONS FOR LARGE BUYERS.

London Agents: HY C. QUELCH & CO., 4 LUDGATE SQUARE, LONDON, E.C.

R. T. DUN, 5 OSWALD STREET, GLASGOW.

AFTER FIFTY YEARS Dun's Capsules are
still admitted to be the Best. They are made of
the purest drugs obtainable, and are most

A. MILLAR & CO., LTD., DUBLIN
PURE ORANGE WINE

VINUM AURANTIL, B.P.

Prepared in strict accordance with the Formula of the British Pharmacopoeia.

(Wholesale only.)

London Agent: JAMES STIRTON, 43 GREAT TOWER STREET E.C.

ZORAYA
Ointment & Soap

A genuine preparation of great curative
value for all Skin Complaints and kindred
ailments, cuts, wounds, burns, &c. A
unique remedy for Piles.

33½ % Profit.

CHARLESTON & CO., 8 & 9 Talbot Court, E.C.

Showcards and Window Display on Application.

Radiozone (Oxygen) BathsFOR the administration of Oxygen in a
concentrated and highly nascent
condition. Specially valuable in cardiac
cases, with high arterial tension, in
nervous and vaso-motor disturbances,
insomnia, and auto-intoxication.

Patentees and Sole Manufacturers:

WRIGHT & CO., Silverlands, Buxton, England.

Prices and Literature on Application.

SEDNA

The Best Tonic Wine known to Modern Science.

**ONE BOTTLE OF SEDNA
EQUALS THREE BOTTLES OF
ORDINARY BEEF WINES.**

is the Ideal Food Beverage

It contains

Extract of Meat *Best Quality.*

Coca Leaves *Active Principles.*

Kola Nuts *Active Principles.*

Port Wine *Finest Quality.*

Chemists will thus recognise how useful SEDNA is for recuperating patients in hospitals, etc., and how invaluable it is for anyone suffering from Anæmia.

It is a genuine Pick-me-up.

30/- DOZ. (Large Bottles).

CARRIAGE PAID, F.O.B. LONDON, LIVERPOOL, OR GLASGOW.

DEANS, LOGAN & CO LTD BELFAST, IRELAND

And 25 Great Tower Street, LONDON, E.C.

AGENCY PROPOSALS ENTERTAINED.



THE FRENCH NATURAL MINERAL
— WATER. —

VICHY-CÉLESTINS

DISORDERS of the **LIVER, GOUT,**
Diabetes, Rheumatism, Gravel, &c.

VICHY-ETAT PASTILLES.

Two or three Pastilles after each meal facilitate Digestion.

CAUTION.—Each Bottle from the STATE SPRINGS bears a neck label with the words "VICHY-ETAT" and the name of the **SOLE AGENTS: INGRAM & ROYLE, Ltd., Bangor Wharf, 45 Belvedere Road, LONDON, S.E.**

PROPERTY OF THE FRENCH GOVERNMENT.

Profit - - **33 $\frac{1}{3}$ % PROFIT**
ON COST

**CHELTENHAM NATURAL
APERIENT WATER.**

Pleasure - Satisfied customers, who
always want more.

Patriotism It is patriotic, and it is
good business to supplant
Apenta, Hunyadi and Carls-
bad Waters by Cheltenham
Natural Aperient Water.

**THE NATURAL
BRITISH PRODUCT.**

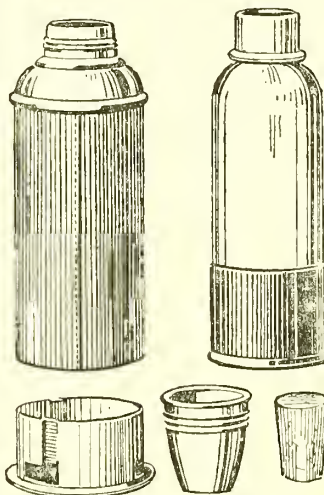
Packed in Cases of 24 Bottles,
9/- per dozen.

Retail price (protected) at 1/- Bottle.

Order through Messrs. INGRAM &
ROYLE, MAY, ROBERTS & CO., LTD.,
or direct from

**THE CHELTENHAM
NATURAL WATER CO.**

Priory Court, Cheltenham Spa.

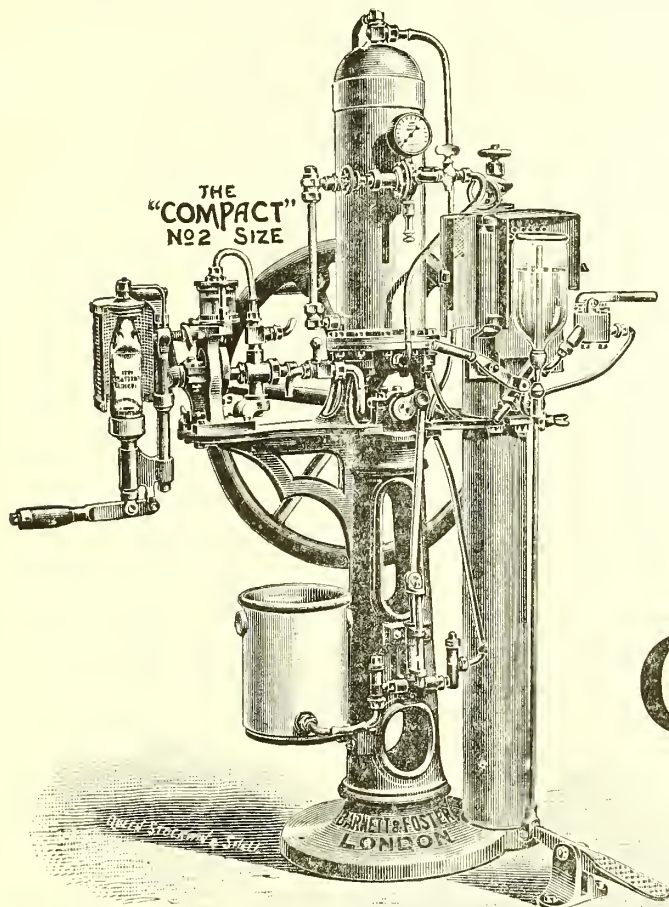


**THESE
ARE THE
VARIOUS
PARTS
OF AN**

"ALL-BRITISH" VACUUM FLASK

and they are all made in England, including the glass vacuum bottle. **Q** This is identical in all models, which sell at different prices according to "finish" of outers.

AERATORS, Ltd., UPPER EDMONTON, N.



We supply every machine, article and appliance needed for the manufacture of aerated waters. Our lists, including the "Red Club" monthly price list of Soluble and Fruit Essences, Essential Oils, Mineral Water Salts, Colourings, Chemicals and Drugs, posted free anywhere.

For Chemists

"Compact" Soda-water Machines have been specially designed for the use of chemists.

They supply just as little, or just as much, bright, sparkling aerated water bottled in syphons, patents or other bottles, as your trade calls for and, as the machine always stands ready for immediate use, the goods, when sold, have the advantage of being freshly carbonated.

No previous knowledge is needed to successfully operate "Compacts"; full instructions for running, and for the manufacture of beverages, are sent with each plant. There is no gas to make, the carbonating pressure being derived from tubes of liquefied CO₂, and a lad can drive the machine and bottle the product.

"Compacts" render you quite independent of outside suppliers; increase your profits and enable you to offer waters of a uniform, dependable, quality.

PRICES.

Complete and ready for work with automatic safety gas-pressure reducing valve and stand for gas-tube.

| Size. | Output in 10 oz. bts. per day by hand | With filler for either bottles or syphons. | With both fillers. | EXTRAS — Syrup pump for bottle filler, £2 2 0; for syphon filler, £5 5 0. Power pulleys for Nos. 2 & 3 sizes, £3 3 0 |
|-------|---------------------------------------|--|--------------------|--|
| No. 1 | 600 doz. | £57 | £60 | |
| " 2 | 350 " | £45 | £48 | |
| " 3 | 200 " | £33 | | |

* When fitted for power double these outputs. A smaller machine is supplied at £20

BARNETT & FOSTER

ENGINEERS

(Proprietors of GALLOWAY BROTHERS).

Niagara Works, 26¹/₂ Eagle Wharf Road, London, N.

And at BOLTON, LANCS.

Telegrams: "Drinks London."
"Soda Bolton."

Telephones: London: North 1605.
Bolton 545.

DR. J. COLLIS BROWNE'S CHLORODYNE

Revised Prices and Terms :

OCTOBER 1915.

| | | | | | | | |
|-----------------------|------|------|------|-------------|-------------|-------------|--------------|
| Size | | | | 1/3 | 3/- | 5/- | 12/- |
| Minimum Retail Price | | | | 1/2 | 2/10 | 4/9 | 11/6 |
| PRICE TO TRADE | | | | 11/9 | 29/6 | 48/9 | 117/6 |
| | | | | (Per Dozen) | | | |

Discount: 5 per cent. on £1 worth, 7½ per cent. on £5 worth and upwards.

Packages charged 3d. on £2 parcels or under, and 1d. for each extra £1 worth, and are not returnable. Carriage forward.

Terms: Cash with order. Most Wholesale Houses supply on equal terms.

Dr. J. Collis Browne's

Chlorodyne

is on P.A.T.A. Protected List, & must not be sold below the prices named above.

J. T. DAVENPORT, Ltd., Proprietors,
117 Union Street, S.E.

THE CHEMIST & DRUGGIST SUPPLEMENT.

OFFICE: 42 CANNON STREET, E.C.

SATURDAY, NOVEMBER 20 1915

TO ADVERTISERS IN THIS SUPPLEMENT.

The Publisher desires to make it clear that advertisements of Businesses for Disposal and Wanted, Situations Open and Wanted, Exchange Column, &c., **MUST BE PREPAID** (except in the case of serial advertisers), and to ensure prompt insertion: **REMITTANCES MUST ACCOMPANY INSTRUCTIONS.**

Advertisements for the current issue cannot be received after 4 p.m. on Thursday in each week. If it is necessary to telephone or telegraph an urgent announcement this may be done

PROVIDED the MONEY is TELEGRAPHED

at the same time and the fact made clear that the money order is to be delivered at 42 CANNON STREET, LONDON, E.C. Advertisers will assist greatly in the preparation and quick despatch of the Supplement by making careful note of these rules. Telephone: No. 3617 Central (3 lines). Telegraphic Address: "Chemicus Cannon London." (Three words counted as two.)

**BEST RESULTS
EVERY WEEK!**



That is what advertisers in The Chemist and Druggist Supplement secure. Not indefinite returns from spasmodic and inflated circulation, but regular, steady success—the best possible in the Drug Trade. It gives

THE PUBLICITY IT PAYS TO PAY FOR.

CHEMISTS' TRANSFERS.

Messrs. ORRIDGE & CO., 56 Ludgate Hill, E.C.

Telephone Number: City 2283.

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

1.—SOUTH KENSINGTON.—Business of best class for Disposal, giving a net average profit of £400 yearly; situate in one of the best residential districts and capable of increase under personal attention; every investigation allowed; vendor retiring.

2.—S.W. MAIN LINE (Few Miles Out).—Retail and Dispensing Business of good class, returning between £1,500 and £1,400, at good prices; moderate rent; held on lease; with house attached; excellent situation in centre of residential locality; valuation terms entertained.

3.—LONDON, W.—Good-class Retail and Dispensing Business, situate in busy part; returns now between £1,600 and £1,700, and capable of extension; up-to-date front; very attractive and large stock; roomy house; long lease; rent moderate; valuation terms.

4.—PUTNEY (Near).—Good middle-class Retail and Dispensing Business for Disposal through ill-health; returns increase yearly, present rate about £1,800; net profit £350; well-appointed, double-fronted shop; terms, £50 and valuation of stock and fixtures.

5.—LONDON, N.—Price £650, or valuation of stock and fixtures and sum for goodwill; a good but neglected business, returning under manager between £1,000 and £1,100; gross profit £437; books audited by accountant and stock taken annually.

6.—CITY (Within Easy Distance of).—Ready-money Business, situate in main marketing thoroughfare; corner position; returns between £900 and £1,000; gross profit 50 per cent.; moderate rent; held on lease; roomy shop, fairly fitted and stocked; price £350, or near offer.

7.—MIDDLESEX (Nice Locality).—Few miles from town; Family Retail and Dispensing Business, returning between £600 and £700; net profit £200; double-fronted shop, fitted in masonry, price £475.

8.—ACTIVE PARTNER WANTED, with small capital at command, for half-share in old-established Business with Branch; net profit £500; good scope for increasing trade with energy.

9.—BRISTOL (Within Easy Distance of).—Unopposed Mixed Retail Business; present hands 17 years; returns between £700 and £800; estimated net profit £200; rent only £21 10s. for single-fronted shop and good 8-roomed house; garden full of fruit trees, also outbuilding; fairly good fixtures and ample working stock; no reasonable offer refused; part payment.

10.—HANTS (Health Resort).—High-class Retail and Dispensing Business for Disposal through old age; capital house, which could be sub-let; a young man with energy would soon make a big business.

11.—SOUTH WALES (Seaport).—Retail, Dispensing, and Photographic, together with Wine Licence; returns £1,500, at good profits; the shop offers a good nucleus; good residence, with large garden; no reasonable offer refused.

12.—SUSSEX.—First-class country connection in good district; returns exceed £800 and net profit £300; comfortable residence, with private entrance and small garden; practically no opposition; rare opportunity; price £750; fullest investigation courted.

13.—BERKS.—Good-class unopposed Country Retail and Dispensing Business, returning £747 at full prices; rent £34, sub-let £10, held on long lease; ill-health reason for disposal.

VALUATIONS FOR STOCKTAKING.

Messrs. O. & Co. desire to emphasize the necessity of a Periodical Statement of Account, by which means alone Profit, the value of Business, &c., can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted, and eventually becomes the cause of confusion and loss.

Messrs. O. & Co. are prepared to undertake these essential duties, and will make Special Terms for such services.

ORRIDGE & CO., 56 LUDGATE HILL, LONDON, E.C.

BRETT & CO.

Licensed Valuers,

73 LAUREL ROAD, LEICESTER.

Telegrams, "Brett Leicester."

Telephone 1934.

F. J. BRETT, M.P.S.,

GIVES PERSONAL ATTENTION TO ALL VALUATIONS.
NO CHARGE TO BUYERS.

AGENCY.—We have always a large number of *Buyers* on our books, and we can frequently find a purchaser at once. We also have a *Private Register* for vendors who are in no hurry to sell, and who do not wish their businesses to be advertised.

STOCKTAKING SPECIALISTS to the Entire DRUG TRADE.

£1,400 returns.—YORKSHIRE.—First-class Retail and Dispensing, in fashionable town; good position; old-established; very sound investment; about £1,100.

£600 returns.—SURREY.—Light Retail and Family trade; no N.H.I., but plenty of scope for this; lease; price £275.

£1,180 returns.—CHESHIRE.—Good-class Family Retail; many years in same hands; net profit £300; price £500, or nominal goodwill and valuation of stock and fixtures.

£83 returns.—SURREY.—General Light Retail, with good opening for either Optics or Dentistry; low rent on long lease; price £400

£1,400 returns.—SOUTH YORKS.—Good-class Retail, in prosperous market town; price £800.

MIDDLESEX.—Exceptionally good Family Retail, showing over £500 net; only cause for sale state of health, and for this reason £775 will be accepted.

We have cash Buyers for businesses from
£500 to £5,000.

Valuations conducted upon the shortest notice
at moderate fees.

BERDOE & FISH

VALUERS & TRANSFER AGENTS,

35 Jewry Street, Fenchurch Street, City.

Telephone: 1809 CENTRAL.

NO CHARGE TO PURCHASERS.

1.—HOME COUNTY (35 Miles Out).—First-class Dispensing and Retail Business in most desirable town; returns £1,200; excellent profits; plenty of scope; good house, etc.; price £700, or £100 and valuation; personally recommended.

2.—YORKS (West Riding).—Middle-class Business, in large Manufacturing town; returns over £1,000; net profit £350; very low rent; good premises, pleasantly situated; price £650, little more than valuation.

3.—Lincs (Market Town).—Light Family Retail Business, with own Specialities; returns about £1,350, increasing; large double-fronted shop, well fitted and stocked; low rent; price £900.

4.—CHESHIRE (Border of).—Light Retail, Dispensing, and Agricultural Business in small town; returns about £1,200; net profit £300; double-fronted shop, fully stocked; price £650.

5.—WILTS.—Unopposed Light Country Retail, with Mineral Waters; returns £1,200; net profit £300 clear; large house and garden; stock worth £650; price £700.

6.—NORFOLK.—Good-class Business, in large town; neglected; returns £800; plenty of scope; corner position; low rent; price £350; £100 can remain; strongly recommended.

7.—WEST MIDDLESEX.—Good-class Retail and Dispensing Business; returns over £1,100; net profit £400; fine position; low rent; well fitted and stocked; price £750; worth attention.

8.—SURREY (Suburb).—Good-class Light Family Retail, pleasantly situated; returns £1,450; good profits; attractive Pharmacy, fully stocked; price £850, or valuation terms; books properly kept.

9.—LONDON (Western Suburb).—Sound Light Retail, with valuable appointment; returns £1,260; net profit £350; good position; excellent stock; price £550, or valuation.

10.—LONDON, S.W. (Few Miles Out).—Good middle-class Business, entirely under manager; returns over £700; plenty of scope; good position; well stocked; price £375.

STOCKTAKINGS.

We undertake stocktakings on a very low scale of commission or an agreed fixed fee, and also price out Chemists' own stocktakings. Please apply for our terms.
Businesses Wanted. Buyers Waiting.

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50 years' experience in every branch of business.

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IN centre of large South Coast winter resort; old-established, well-fitted, double-fronted Pharmacy; Dispensing and Retail; returns £1,700; good prices; 3,000 new serips; house can be let off if desired; price £150 and valuation.

GOOD thoroughfare, Paddington; old-established Retail and Dispensing; 1,500 new serips; returns yearly increasing, now considerably over £1,200; good Proprietaries; rent £80, reduced during war to £70; house can be readily let off; price £150 and valuation; vendor anticipates early enrolment.

CORNER site, leading thoroughfare, E.C. district; old-established Cash Retail; returns £1,200; rent £200; four floors, two rooms each, can be let off; shop well fitted and fully stocked; price £500.

HANDSOME Shop in good district, West London; bus route and near underground station; fully stocked and well fitted; returns over £1,000; house let off, three flats, to cover whole of rent, £100; vendor has other engagements and will accept £500, which is less than value of stock and fixtures.

All the above are open to fullest investigation.

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CHEMISTS' VALUERS, TRANSFER AGENTS,
AND EXPERT STOCKTAKERS,

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BUSINESSES FOR DISPOSAL.

3s. 6d. for 50 words or less; 6d. for every
10 words or less beyond, prepaid.

The Advertiser may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of 6d.

EASTERN County.—Good-class Retail Business, with Wines and Spirit Off-License, for Disposal on account of ill-health; turnover about £3,400; no N.H.I., Optical, or Photographic; owner would entertain offer of smaller business as part payment. 71/12, Office of this Paper.

LANCS (Popular Seaside Resort).—Exceptional opportunity for acquiring a sound Business at a very moderate figure; handsomely fitted, well stocked; occupies a commanding corner position; turnover £720 (increasing); exceptional profits; easy rent. Apply, 67/30, Office of this Paper.

LONDON, S.W.—Old-established Business, run on modern lines; up-to-date stock, mahogany fixtures, electric light and gas; lease 17 years to run; valuation of stock and fixtures £700; returns for 1914, £1,450; price £500, cash down or by arrangement. Apply, "Nil Desperandum" (40/39), Office of this Paper.

NEAR London.—Well-established good-class Family Retail in lovely residential district; returns nearing £900, increasing; gross profit 40 per cent.; rent £60; excellent house and every convenience; price £500 net cash; genuine offer. 71/11, Office of this Paper.

NORTHERN Inland Health Resort.—A high-class Dispensing and Photographic Business for Disposal; returns about £1,200; best situation in town; handsome modern front by Maw; good reasons for disposal. Particulars, apply, 67/6, Office of this Paper.

SOUTH COAST.—Capital Drug Stores Business for Sale, price £100; splendid position in busy thoroughfare; exceptional opportunity to qualified man; personal test of business invited; nearly 500 customers weekly; stock and fixtures at valuation; under present unqualified manager doing £700. Apply, "S." (62/13), Office of this Paper.

SOUTHPORT.—Genuine Dispensing and Light Retail Business; established 26 years; clean modern stock; good position for development; stock and fixtures at valuation; rent £65. Ball & Fercival, 132 Lord Street, Southport.

FOR Sale as a going concern, at valuation of stock and fixtures; situated in healthy good-class suburb, close to station, S.E. London; good house and garden, low rental; average weekly takings last three years £12 10s., and no N.H.I. work; or would sell stock and fixtures for removal, or the handsome fixtures only. 68/36, Office of this Paper.

GENUINE Cash Business in South Wales colliery district; present net cash returns under management £800; Insurance work extra £250; every investigation offered to *bona-fide* purchaser; average net profits £250; large sale of own preparations, and no Side-lines; price £550, or valuation. "Reliable" (66/27), Office of this Paper.

LARGEST Village in Middlesex, population 5,000; entirely unopposed; lock-up shop at very cheap inclusive rental; very profitable trade, mainly Prescribing; suit qualified or unqualified; present hands 7 years; price £60, or valuation stock and fixtures; a thoroughly genuine bargain; owner cannot give full time. 70/17, Office of this Paper.

PROPRIETOR of old-established Business in country market town, who has been offered a position in His Majesty's Forces, wishes to Dispose of his business; takings last year £1,700. "Country" (69/29), Office of this Paper.

£60 will buy a well-stocked and old-established Drug Business; no opposition; increasing turnover; rent only £18 10s.; low rates; small house over; full price obtained for Patents; gross profits 5 per cent.; only wants seeing; owner ordered immediate change; a bargain to anyone after a genuine little business. 70/16, Office of this Paper.

SALES BY AUCTION.

THE Stock and Fittings of a Chemist.—2,000 bottles Perfumery, Brilliantine, Bay Rum, Toilet Brushes, 1,000 Patent Medicines, Trusses, Dressings, etc., 2,000 tins Washable Distemper, 100 dozen tins Disinfectant, 2 Whole-plate Cameras, Photographic Sundries, a large quantity Sponges and Chemist's Sundries, Drugs, etc., Plate-glass Showcases, Counters, and Mirrors. Mr. Frank G. Bowen will Sell by Auction at his rooms, 62a Aldersgate Street, London, E.C., on Tuesday, 23rd November, 1915, at 1. On view day prior. Catalogues of the Auctioneer.

FOR SALE.

CHEMIST'S Stock and Fittings for Sale; splendid opportunity to secure a bargain; must be sold quickly; valuation about £120; no reasonable offer refused. Apply, E. C. Clarke, 165 Great Jackson Street, Hulme, Manchester.

TOTAL-ADDING and Sales-printing "National" Till for Sale; takes sales up to £2; must sell quickly. Write, "G. C.," 14 York Road, Battersea, S.W.

2 CWT. Hypo, 20s. cwt.; 98 lb. Acid. Tart. Xtal Parv. Ang., at 2s. 9d.; 10 lb. Acid. Salicylic, at 19s.; 50 oz. Quin. Sulph., at 3s. 6d.; 1/2 lb. Acid. Acetosul., 30s.; 7 lb. Pot. Permang., at 3s. 3d.; 7 lb. Ammon. Bromid., at 18s.; 8 oz. Sulphonal, 20s.; 8 oz. Ammon. Benz., 8s.; 8 oz. Phenacetin at 3s. 9d.; 10 oz. Indigo at 1s. 4d.; whole or part lots. W. Lean, 22 High Street, Burton-on-Trent.

AGENCIES.

CHINA.—British Merchant, with fine connections amongst native Druggists and Doctors, and successfully working his own Proprietary, desires Sole Agency for thoroughly first-class article suitable to this market, to push with his own. Replies to J. H. Richards, 81 Szechuen Road, Shanghai.

ADVERTISER, experienced, with first-class connection, has special facilities for placing new articles of real merit or opening new accounts for established firms; terms arranged to mutual advantage. "S." (64/21), Office of this Paper.

BUSINESSES WANTED.

CHEMIST wishes to Purchase a good-class Cash Business, returning £1,000 to £1,500 per annum; Yorkshire or North Midlands preferred but not essential; with moderate rent and fair profits; neglected business entertained provided there are good opportunities for increase; cash settlement and references given. "Genuine" (70/25), Office of this Paper.

TENDERS.

ESTIMATES wanted for pricing National Insurance Prescriptions, 1916. 66/15, Office of this Paper.

PARTNERSHIPS.

WANTED, a Partner in an old-established Business, with a view to purchase; returns between £30 and £40 a week; has done double, and easily could again, but has been neglected through illness and other causes; some good Proprietaries. Capital required and all particulars on application to "Vera" (70/14), Office of this Paper.

TO LET.

CHEMIST'S Shop to Let in centre of Tylorstown, Rhondda Valley; good business district; large collieries supplying best Admiralty coal; neighbourhood densely populated; safe opening for energetic man; shop recently fitted with up-to-date fixtures and cases for Chemist; two windows with modern fittings. Apply, Mrs. Smith, Brynaethnen, Tylorstown.

CHEMIST'S old-established Business, Shop and house, now to be Let through death of late proprietor; most of fittings remain; rent £40; situate 146 Southampton Street, Camberwell, S.E.; main thoroughfare to North Peckham. Owner, E. J. Barrett, 70 Southwark Bridge Road, S.E.

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3s. 6d. for 50 words or less; 6d. for every 10 words or less beyond, prepaid.

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RESULTS
OF ADVERTISING IN THIS SUPPLEMENT
LAST WEEK NOV 13 1915
NATURE OF ADVT. REPLIES

UNQUAL. ASSISTANT 25
BUSINESS WANTED 16
LADY DISPENSER 11
UNQUAL. ASSISTANT 11
QUAL. MANAGER 10

This Blackboard demonstrates that Advertisers using these columns get a ready response to their announcements. The figures only refer to some of the letters RECEIVED AT OUR OFFICE on behalf of Advertisers who use a number or nom de plume.

RETAIL.

BEACONSFIELD.—A lady Assistant or ineligible gentleman required for a Dispensing business; outdoors; hours 8.30 to 7.30, alternate evenings to 9; good experience essential. State height, salary required, and send full particulars to Mr. R. W. Brooke Chemist, Beaconsfield.

BERKS.—Wanted, an Assistant, unqualified (ineligible for the Army), in good-class country Retail; Dispensing experience and a knowledge of Photography essential. Apply "Omega" (70/31), Office of this Paper.

BOLTON.—Wanted, qualified Chemist to Manage a Branch; not eligible for military service. Apply, Waller & Riley, Ltd., Bolton.

BRADLEY & BOURDAS, 48 Belgrave Road, S.W., require an Assistant; lady or gentleman. Particulars to Mr. Taylor.

CANTERBURY.—Assistant wanted early in December for good-class Retail and Dispensing; capable and experienced; outdoor berth; married man preferred; easy hours. Apply, with usual particulars, stating salary required, to R. Croft, 1 The Parade, Canterbury.

TABLETS.

An opportunity will shortly occur in a Tablet Works for a practical man who thoroughly understands Coating, Polishing, Granulating and Compression, care of machinery, etc.

Applicants should enclose copies of references, state abilities and remuneration required to

“HEXAMINE” ³⁸/₇₃

c/o The “Chemist & Druggist,” 42 Cannon St., E.C.

CESHIRE.—An Assistant, ineligible for Army. All particulars, Wm. Snow & Sons, Birkenhead.

CROYDON.—A Junior Assistant or Part-time Assistant required at once; this vacancy will suit an elderly man requiring light duties. S. Vincent, Chemist, 215 Lower Addiscombe Road, Croydon.

EASTBOURNE.—Assistant required for good-class Retail and Dispensing business; in- or out-doors; lady or gentleman; easy hours; comfortable situation. State age, height, experience, salary required, and enclose photo, to J. Forbes, Pharmacist, Eastbourne.

EXETER.—Junior Assistant wanted for good-class Dispensing and Counter work, also some knowledge of Photography. Apply, stating experience and references, to Wynne Tighe, Chemist, Exeter.

EXMOUTH.—Assistant required for good-class Retail and Dispensing business; moderate hours; comfortable berth. Apply, with usual particulars, to E. J. Challenger, Chemist, Exmouth.

GLAMORGAN, South Wales.—Exceptional opening for energetic and reliable Welshman capable of taking entire management of Branch; must be qualified and about 40 years of age; good salary and a liberal interest in the profits offered to the right man. 70/102, Office of this Paper.

GREAT YARMOUTH.—Lady Dispenser and Bookkeeper, qualified, required in a fortnight for a Doctor's practice. Apply, stating age, salary required (outdoors), and giving references, to Wrigley & Potts, Surgeons, St. George's Gate, Great Yarmouth.

GUILDFORD.—Assistant as Junior, lady or gent, for best-class Retail and Dispensing business; easy hours; outdoors. Jeffries, Chemist, Guildford.

HAMPSHIRE.—Required, early in December, for good-class Retail and Dispensing business in the country, unqualified Assistant, not under 20 (lady or gentleman); Dispensing and good-class trade experience essential; comfortable indoor berth away from business; short hours. James Keeble, Chemist, East Liss, Hants.

HEREFORD COUNTY AND CITY ASYLUM.—Wanted at once, a lady Dispenser, to act also as Medical Clerk. Applications, giving full particulars as to past and present employment and stating if willing to live indoors or outdoors, salary required, and enclosing copies of two recent testimonials, to the Medical Superintendent, County and City Asylum, Hereford.

HORLEY, Surrey.—Assistant required for good-class Light Retail and Dispensing business; easy hours. Apply, with usual particulars, to A. B. Higgs, Pharmacist, Horley, Surrey.

HYTHE, Kent.—Assistant wanted soon; not over 50; outdoors; chiefly for Counter; also lady Assistant; good-class business; easy hours; no Sunday duty. State experience, age, salary required, and references, to H. Barnett, Chemist, Hythe, Kent.

LLANELLY.—Qualified Chemist required; elderly man preferred; light work; permanency if suitable. Apply, with full particulars and salary required, Wade, Chemist, Llanelly.

LONDON Homeopathic Hospital, Great Ormond Street, Bloomsbury, W.C.—Applications are invited for the post of Senior Dispenser (male or female) at this Hospital; salary £120 per annum; candidates must possess the Major qualification of the Pharmaceutical Society and be from 25 to 35 years of age, and have had previous Hospital experience in a large London or provincial General Hospital; an acquaintance with the methods of the British Homeopathic Pharmacopoeia is essential. Applications, with copies of not more than three testimonials of recent date, must be delivered to the Secretary on or before the 27th November, 1915. Edward A. Attwood, Secretary.

LONDON.—Comfortable berth with progressive salary for capable unqualified Assistant; high-class business; permanency. “Chemicus” (70/10), Office of this Paper.

LONDON.—Qualified Assistant for West-End Dispensing business. 71/16, Office of this Paper.

LONDON (Suburb).—Competent Assistant, also a Junior; both outdoors; good-class Retail, Dispensing, and Photographic; salary offered an improvement of 5s. per week on last permanent berth. State age, height, experience, salary expected, and when disengaged, 66/12, Office of this Paper.

LONDON, N.—A competent Assistant; in- or out-doors; salary £65 indoors, £104 outdoors; also a Junior, just out of his apprenticeship; salary £35 to £40 (indoors); hours 8.30 to 9.30; usual half-day off weekly. Apply (letter only), stating experience, names of references, and when disengaged, “Pharmacist,” 300 Amhurst Road, Stoke Newington, London, N.

LONDON, N.—Lady Dispenser wanted; outdoors; Light Retail and Dispensing business; comfortable situation. State age, experience, salary required, and photo if possible, Starmer, Chemist, North Finchley, N.

LONDON, N.—Wanted, unqualified Assistant for Counter and N.H.I. chiefly; not eligible for Army preferred (from age or otherwise); comfortable berth; state salary required and the usual particulars, and enclose photograph if convenient. Apply, G. Daniel, 630 Holloway Road, N.

LONDON, N.—Assistant for Retail and Dispensing business; one whole day off duty weekly. S. Long, 9 The Broadway, Stamford Hill.

LONDON, N.E.—Wanted, a Junior for N.H. Dispensing; salary £2 2s. a week; also a girl, aged about 20, for packing stock and dusting shop; one who has experience in Drug packing; wages from 15s. to 20s. per week. Apply, Barnard & Son, 309 Hackney Road.

LONDON, N.W.—Assistant required in good-class business; ineligible for Army. Usual particulars to Stevens, Heath Street, Hampstead.

LONDON, N.W.—Assistant wanted for Dispensing business; man or woman (man not eligible for military service); outdoors. Apply, with full particulars, P. Davidson, Fh. Chemist, 342 High Road, Brondesbury, N.W.

LONDON, S.E.—Assistant wanted (outdoors) for quick Cash business; close Thursday 1 o'clock; no Sunday duty; over military age. State experience, and salary required, Brooks' Drug Stores, corner of High Street, Broadway, Deptford.

LONDON, S.W.—Lady Assistant; outdoors; chiefly for Dispensing; must be neat and accurate; hours 8.30 to 8, Saturdays 9.30; Sunday duty, every third, 6 to 8 p.m.; salary 35s. weekly to commence. Apply, E. F. Strickland, 28 The Broadway, Ealing, W. Also Evening Assistant for three evenings weekly.

LONDON, S.W.—Wanted, a good Assistant; Whole- or Part-time; not eligible for Army preferred (from age or otherwise); in- or out-doors. Apply, with full particulars, Watson, 100 Mitcham Road, Tooting, S.W.

LONDON, S.W.—Part-time Assistant required, afternoons and evenings, or evenings only, for Dispensing and Counter Applications from ladies entertained; no duty Sundays or Wednesdays. Apply, Beech, 156 Stockwell Road, S.W.

LONDON, S.W.—Unqualified Assistant wanted, ineligible for the Army; in- or out-doors; lady not objected to. Please apply, with usual particulars, to T. H. Jenkins, Chemist, 145 Lower Richmond Road, Putney, S.W.

LONDON, S.W.—Required, Dispensers, ladies or gentlemen, with good experience; hours of work approximately 8.45 a.m. to 6 p.m.; no Sunday duty. Write, stating salary required and full particulars, to 2,150, Sells' Advertising Offices, Fleet Street, E.C.

LONDON, W.—Chemists' Assistants for Retail Counter; ineligible for the Army; applications considered from ladies with the necessary experience. Apply, Selfridge's, Oxford Street, before 11 a.m. or after 5 p.m.

LONDON.—Wanted, good outdoor unqualified Assistant presently; main road, busy thoroughfare; good salary to suitable man; hours 8.30 to 9; one clear day a week off; 1½ hour for lunch, ¼ hour for tea. Apply, "Counter" (72/22), Office of this Paper.

LONDON, W.—John F. Harrington, 15 Kensington High Street, requires a Junior Assistant. Apply, stating full particulars, together with age, height, and salary required (outdoors), also when disengaged, and enclosing photo (to be returned).

LONDON, W.—Wanted immediately, to pack Proprietaries, keep stock, and assist in shop when required, a young man or young lady. State salary required and previous experience to John Atkins, Chemist, 109 Queen's Road, Bayswater, W.

LONDON, W.—Wholesale and Retail.—Wanted immediately, unqualified Junior Assistant; hours 9 to 6, Saturdays 1 o'clock; no Sunday duty. Apply, personally or by letter, to Hospitals & General Contracts Co., Ltd., 27 Mortimer Street, W.

LONDON, W.—Assistant (Junior): unqualified; must be experienced in Dispensing; ineligible for Army; easy hours. Full particulars of experience, etc., to G. W. Gray, Pharmacist, 194 Holland Park Avenue, W.

MANCHESTER District.—Junior Assistant (outdoors) required for good-class Retail and Dispensing business; only military ineligible need apply. Address, usual particulars, with photo (if convenient), to T. & W. Woodruff, Chemists, Cheadle, Ches.

MANCHESTER.—Qualified Assistant; elderly or middle-aged; permanency; easy hours; not single-handed. Full particulars to "Manchester" (72/15), Office of this Paper.

MIDLANDS.—Qualified Manager, age about 40, for progressive Cash business; married man preferred, though not essential; good salary and commission on profits offered. "Midland" (70/101), Office of this Paper.

MIDLANDS.—Unqualified Assistant, age about 40, required for quick Cash business; must be good Counterman and Dispenser. State salary required and when at liberty, 70/103, Office of this Paper.

NEATH.—Assistant wanted soon; unqualified; either sex; elderly capable man or otherwise; outdoors; liberal terms; no after hours nor Sunday duty. J. Griffith Isaac, Pharmacist, Neath.

NORFOLK (Large Town).—Wanted at once, for old-established working-class business, a registered or qualified Assistant; elderly or semi-retired; healthy position; duties light; easy hours; close Sundays, 1 o'clock Thursdays; salary to commence £2 5s.; splendid chance in every way for steady and obliging man. Apply, "Nervoids" (67/7), Office of this Paper.

NOTTINGHAM.—Assistant wanted at once, unqualified, lady or gentleman, for good-class Retail and Dispensing business; outdoors. Apply, giving usual particulars, and enclose photo, to "G. P.," 177 Mansfield Road, Nottingham.

SALE, Near Manchester.—Unqualified Assistant wanted for good-class Dispensing and Photographic; quick, accurate, and obliging. State full particulars and salary required (outdoors) to R. H. Toothill, Pharmaceutical Chemist, Altrincham.

SALISBURY.—Junior Assistant wanted for high-class Dispensing business where two other Assistants are kept. Apply, stating full particulars, with salary required, either in- or outdoors, to Read & Orchard, Market Place, Salisbury.

SHEFFIELD.—Wanted, at once, a qualified Assistant for the Mixed Retail trade in a working-class district; one having had some experience in this class of trade preferred; N.H.I.; permanency; Thursday half-holiday; no Sunday duty; outdoors; references to be sent for strict investigation. Exor. J. Watts, 696 Attercliffe Road, Sheffield.

SOUTH KENSINGTON.—Wanted immediately, Assistant; not liable to military service; must be accustomed to high-class Dispensing business; sleep in, live out; Sunday and evening duty shared by three. Apply, personally or by letter, with photo, etc., to "B. R. W.," c/o Stickland & Co., 23 Cromwell Place, South Kensington.

SOUTH OF ENGLAND.—Assistant required; experienced; permanency, with good salary. Timothy White Co., Ltd., Chemists, Portsmouth.

STOKE-ON-TRENT.—Wanted, Junior Assistant, unqualified, to start in December. Apply, Hill, Pharmaceutical Chemist, Stoke-on-Trent.

TUNBRIDGE WELLS.—A competent Assistant for good-class Dispensing business; outdoors. State usual particulars, salary required, and enclose photo to 39/23, Office of this Paper.

WALLINGFORD.—Manager required for about November 28, for small market town; good-class Retail, Dispensing, and Photographic business; must be good Counterman and Prescriber and understand the Agricultural side. Apply, with full particulars as to salary and experience, to Holme, Chemist, Wallingford, Berks. Applicants not answered in three days declined.

WALSALL.—Unqualified Assistant (lady or gentleman). Apply, with full particulars, photograph (to be returned), saying salary required (outdoors), E. M. Elliott, Pharmaceutical Chemist, Walsall.

WESTCLIFF.—Capable Assistant or lady Dispenser; must be accustomed to modern good-class Retail and Dispensing; male applicants must be ineligible for military service; very comfortable berth assured. Send full particulars, first letter, and salary required (indoors), enclosing recent photograph, to Body, "Westwood," Westcliff-on-Sea.

WORCESTER.—Unqualified Assistant wanted for good-class business, either in- or out-doors; one ineligible for Army. Apply, with full particulars and salary required, to George & Welch, Pharmaceutical Chemists, Worcester.

A COMPETENT Assistant wanted last week in December; qualified preferred, but not essential; married or single; first-class experience required; for a high-class Retail and Dispensing business; good salary and permanency for a suitable man. Particulars and references to W. Parry-Jones, Chemist, Barnet.

BOUTALLS, LTD., London, W.C. require qualified man as Branch Manager. Apply, by letter or personally, Boutalls, Ltd., 150 Southampton Row, W.C.

CHEMIST and Dentist, doing all Mechanical work on premises, has vacancy for Assistant. Please state full particulars, age, experience, where obtained, ability in Pharmacy and Dentistry (if any), if married what family, class of business used, salary required, when disengaged, references, photo, Poster, Ivydale, London Road, Portsmouth.

COMPETENT unqualified all-round Assistant required for Drug department of a London store; must be unfit for service; good salary; short hours. Apply, "Pharmacist," Palmer's Stores, Ltd., King Street, Hammersmith.

DISPENSER wanted, lady preferred, for N.I. Dispensing, etc., in Country Pharmacy. State qualification (if any), salary required (outdoors), experience, etc., to 72/33, Office of this Paper.

LADIES, gentlemen (military ineligible); good salaries; qualified or unqualified Dispensers or Assistants. Apply, stating age, experience, references, salary required, to 36/61, Office of this Paper.

LADY Assistant, experienced at Counter work and Dispensing; salary 30s. per week; vacancy in Yorkshire (West Riding). "West" (70/104), Office of this Paper.

LADY Assistant for Toilet and Fancy goods, Window-dressing, etc. Age, experience, references, and salary required to Bishop & Vincent, 460 Holloway Road, N.

MANAGER wanted for Branch; qualified; married; to live on premises. State full particulars as to age, height, experience, salary required, and if possible enclose photo, to George & Welch, Pharmaceutical Chemists, Worcester.

MAWSON & PROCTOR, Newcastle-upon-Tyne, have vacancy for qualified Junior Assistant.

MESSRS. TIMOTHY WHITE CO., LTD., Chemists, Portsmouth, require a capable Pharmacist as Manager; easy hours; good and progressive salary, with excellent prospects.

QUALIFIED Chemist for Manchester district wanted at once; easy work, suitable to elderly gentleman. Apply, "Combs," c/o John Quilliam & Co., Ltd., Canterbury Works, Manchester.

QUALIFIED lady Pharmacist wanted for the period of the war, or for at least six months, at a London Children's Hospital with about 100 beds; attendance required all day, except Sundays; applicants should state age, qualifications, past experience, and salary desired. Applications, with not more than three testimonials (copies only), to "Hospital Pharmacist," c/o Street's, 30 Cornhill, E.C.

QUALIFIED Assistant at once, to Manage Light Retail; man over military age not objected to if active. State salary and references, "Cefax" (71/5), Office of this Paper.

QUALIFIED Assistants.—Wanted, as soon as possible, two qualified or registered Assistants as Managers of Branches in small market towns; also one unqualified Assistant; permanencies promised to suitable men. Apply, stating age, qualification, salary required, and references, to Ralph Ling, Chemist, Cromer.

QUALIFIED Assistant (outdoors) for high-class establishment; good Dispensing experience essential. Full particulars to "X. Y. Z.," c/o S. Maw, Son & Sons, 7/12 Aldersgate Street, E.C.

SAVORY & MOORE require immediately two qualified Dispensers, Minor qualifications (men or women). Apply, by letter or personally, 145 New Bond Street, London.

SECOND Assistant wanted in a good-class business; opportunity for gaining all-round experience; hours easy; comfortable berth and good salary. Apply, with photo if possible, T. L. Micholls, Pharmacist, Chelmsford.

SQUIRE & SONS, LTD., require immediately two or three qualified Dispensers (male or female). Apply personally or by letter, stating experience and salary required, 413 Oxford Street, London, W.

UNQUALIFIED Assistant wanted, with knowledge of Dispensing and Photography; good Counterman and Salesman essential. Apply, with fullest particulars, to Parke's Drug Stores, Ltd., 65 Harwood Street, N.W.

UNQUALIFIED Assistant required at once for high-class Dispensing business; no Insurance work; permanency; outdoors; must have had experience in good-class work; good salary offered to suitable applicant. 69/38, Office of this Paper.

URGENT for carrying on National Insurance and dependents' Dispensing, a reliable, good all-round Assistant (lady or gentleman); two kept; comfortable berth; or active Partner would be entertained. State age, experience, salary (in- or outdoors), and references, Bevan & Son, Pharmacists, Harwich, Essex.

WANTED, Dispenser, male; ineligible for military service. Dr. Phillips, Hednesford, Staffs.

WANTED, Dispenser and Surgery Attendant by Medical Practitioner on Panel; S.E. London, few minutes from London Bridge; every afternoon free. Apply, Dr. Davies, 22 Wolsley Street, Dockhead, Bermondsey.

WANTED, unqualified Assistant for Mixed Country business; short hours; no Sunday duty; ineligible for military service; age or sex of little importance if capable, active, and willing. Apply, with usual particulars, to S. C. Thompson, Eresby, Cambridge Road, Ely, Cambs.

WANTED, a qualified Assistant for small Lancashire Manufacturing town; to live out; good Counterman and Window-dresser; used to Insurance dispensing; must be steady and obliging. State age and salary required, 70/39, Office of this Paper.

YOUTH from 16 to 18 wanted at once, to assist at Counter and Stock; Chemist's son who desires further experience preferred; no Panel work; hours light, with recreation daily; outdoors; good salary. Address, Chas. Rundle, 220 High Street, Walthamstow, London, N.E.

WHOLESALE.

LONDON, S.W.—Stock-room Assistants wanted; used to Wet and Dry Counters. Write, stating experience and salary required, to 2,129, Sells' Advertising Offices, Fleet Street, E.C.

CHEMIST wanted, with manufacturing knowledge of Organic Chemicals, Hydroxy Acids, etc.; splendid opportunity for capable and energetic man; on Government work; applicants must state experience and salary required. Applications treated in strict confidence. 38/60, Office of this Paper.

COUNTER hands (Wet and Dry) wanted by London Druggists engaged on Government work; good wages and permanency. State particulars to "X." (70 70), Office of this Paper.

COUNTERMEN, experienced Wets and Dries; also Despatch Clerks; good wages and permanency for suitable men. Apply, Evans Sons Lescher & Webb, Ltd., 60 Bartholomew Close.

DRUG Assistants. State age, salary required, and experience. D. Avrton, Saunders & Co., Ltd., Wholesale Druggists, 34 Hanover Street, Liverpool.

DRUGGISTS (Wholesale).—Laboratory hand (Junior), manufacturing department, wanted; also Counter hand. Apply at Apothecaries' Hall, Water Lane, E.C.

DRY Counterman required; permanency. Mention age, experience, and all usual particulars, Timothy White Co., Ltd., Portsmouth.

ESSENCES and Essential Oils.—Experienced Buyer and Salesman wanted, capable of taking entire charge; good prospects. Send fullest details to 40 13, Office of this Paper.

EXPERIENCED girls required for a leading house of Wholesale Druggists in the City; good wages and a permanency to suitable girls. 39 10, Office of this Paper.

INVOICE Clerk wanted for Wholesale Department; hours 8.30 to 6, Saturdays 8.30 to 1; also Assistant; hours 8 to 6, Saturdays 8 to 1. State age, present and past situations, references, and salary. Reade Bros. & Co., Ltd., Wolverhampton.

JUNIOR Clerk, with knowledge of Bookkeeping and, if possible, Shipping work routine; lady Clerk might suit. Apply, by letter, H. E. Stevenson & Co., 122 Great Suffolk Street, S.E.

LABORATORY Assistant required; one accustomed to the examination of Foods containing sugar preferred. Apply, stating experience, age, and salary required, 37/4, Office of this Paper.

LADY Clerks, age about 20, required by City Wholesale house; a knowledge of the trade desirable, but good and quick writing essential. Full particulars and salary required to 37/69, Office of this Paper.

MINOR.—Required immediately, by a Wholesale firm of Manufacturing Chemists, young male and female Pharmacists; Minor qualification. In applying give age, experience, salary required, when disengaged, and enclose photograph (to be returned), 40/32, Office of this Paper.

PACKER (competent) wanted at once; good wages; also Laboratory Assistant; accustomed to making Pharmaceutical Preparations, etc. 72/40, Office of this Paper.

PHARMACEUTICAL Chemist required for Testing Drugs and Laboratory Preparations, and for Experimental work. Mention age, salary desired, and customary information, Timothy White Co., Ltd., Portsmouth.

QUALIFIED Assistant wanted for Scotland; duration of war; ineligible; Wholesale and Retail business; short hours; no Sunday work. Apply, 68/25, Office of this Paper.

SMART youth required for Ledger department of Wholesale Druggists in city. Apply, giving full particulars and wages required, to 40/380, Office of this Paper.

TABLET Room.—Wanted, an experienced man accustomed to Coating, Granulating, and Tablet-making. Address, stating age, experience, and wages required, to "Borax" (40/14), Office of this Paper.

THOROUGHLY competent Invoice Clerk with good knowledge of Costs required; liberal salary and progressive post; fullest particulars to "B. B." c/o Street's, Cornhill, E.C.

TYPIST required; used to copying orders. Apply, giving full particulars and wages required, to 40/38, Office of this Paper.

WANTED, an Assistant Chemist for Cement-testing; candidates eligible for military service or employed on Government work will not be considered; pay 7s. per day. Apply, by letter, stating age, etc., to Box No. 456, c/o Street's, 8 Serle Street, London, W.C.

WAREHOUSEMAN required by Druggists' Wholesale, London; accustomed to despatch of orders; good wages and permanency. State all particulars to "Z." (70 7), Office of this Paper.

WAREHOUSEMAN required for Export department of a large Wholesale Druggist; preference given to a man not of military age. Apply, giving full particulars and wages required, to "Export" (40/40), Office of this Paper.

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(Colonial, Indian and Foreign.)

3s. 6d. for 50 words or less; **6d.** for every 10 words or less beyond, prepaid. The Advertiser may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of **6d.**

RIVIERA.—Qualified Assistant required, speaking French. Apply, in first instance, H. A. Green, S. Maw, Son & Sons, 7/12 Aldersgate Street, London, E.C.

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[HOME.]
RETAIL.

A BELGIAN Chemist, who has been several months Dispenser in a good-class Pharmacy in England, is seeking another post; good references as to character and ability; married. Apply to "W." c/o Bauks Morwen, Crantock Street, Newquay, Cornwall.

AN unqualified man (over military age), of useful all-round experience, wants permanent berth where good steady services would be appreciated; 3½ years present employer; tactful Counterman; London or suburbs preferred. Address, 67/31, Office of this Paper.

ASSISTANT; unqualified; disengaged shortly; Midlands preferred; Extractor, Dispensing, and N.H.I.; town and country experience. "Bismuth" (66/35), Office of this Paper.

ASSISTANT or Manager; qualified; middle-aged; experienced. Wyatt, 45 Beech Road, Luton.

ASSISTANT (Student-Associate), Army rejectée, requires situation immediately; Counter, Window-dressing. Write, stating salary, hours, etc., Fisher, 22 St. Fillan's Road, Catford, S.E.

ASSISTANT; smart, tall; abstainer; 35; Photography, Counter; A1 references. Scott, 153 Addison Way, Golders Green.

ASSISTANT; unqualified; capable of sole charge; thoroughly experienced and reliable; permanency; married, no family; good references. "H.", 40 Boscombe Road, Tooting Junction, S.W.

ASSISTANT (29), married, unqualified, desires permanency; disengaged 27th. G. A. Voizey, 9 Jameson Street, Notting Hill Gate, London, W.

ASSISTANT (lady, Hall certificate) desires post with Chemist; Southampton district preferred; thoroughly experienced, Dispensing, Counter, Photography. Apply, "H.", 47 Buckingham Road, Brighton.

ASSISTANT, reliable, experienced in all branches of Dispensing, accustomed to entire charge (27), married, ineligible, requires 2½ hours off daily, or finish at 6 p.m. (Saturdays excepted). "Rhamni," 35 Halidon Street, Hackney, N.E.

ASSISTANT; 25; sound experience; technical training; disengaged soon; London, West End preferred. 72/17, Office of this Paper.

BRANCH registered Prescriber, Extractor; at liberty; good testimonials. Address, "B.", 236 Battersea Park Road.

CHEMIST-OPTICIAN requires Managership; 35; married; good and varied experience. "H. G.", 6 Lynton Avenue, West Ealing.

CROYDON.—Lady, trained (unqualified), desires work with Dispensing; evenings. 69/16, Office of this Paper.

DISPENSER (lady); 8 years' experience; free 2 to 4 daily five days week; S.E. London. State terms, 70/21, Office of this Paper.

ELDERLY (60), with appearance of 50, unregistered, at present managing business doing £1,500 a year, seeks easier position, preferably small country business; exceptional Counter-man and Prescriber; not afraid of work; 40 years' excellent experience and undeniable references; small salary (30s. if with house and gas). "Janies," 20 Gloucester Place, Brighton.

ELDERLY; glad to Dispense for Doctor during war time. "Medical," 11 Marchmont Street, W.C.

EVENING Dispensing; experienced; good references. "Beta," 28 Park Grove, Portway, West Ham.

EVENING Work wanted; Insurance qualification. "Dispenser," 115 Scott-Ellis Gardens, St. John's Wood.

EVENING Dispensing or Relief, two or three nights. "Normanhurst," Heston Road, Hounslow.

FYLDE Coast or Preston.—New Year; Part-time; unqualified; competent; experienced; 28; ineligible Army; nominal salary; excellent references. 66/32, Office of this Paper.

JUNIOR Assistant; 21; London experience; Photography; ineligible. "Paul," 15 Monk's Road, Exeter.

LADY, with three months' training, wishes position as Assistant Dispenser, Hospital or Doctor, with time for further study. 66/37, Office of this Paper.

LADY Dispenser (young), Hall qualification, desires post with Doctor in London or suburbs; experienced in Parcel work and Bookkeeping. Apply, 68/39, Office of this Paper.

LADY, unqualified, desires post as Assistant to Dispenser, with opportunity to qualify, Hall (re-examination). Miss A., 134 Eastbourne Road, Darlington.

LOCUM work undertaken; elderly. Hepworth, Royland Road, Loughborough.

MANAGER or Assistant; unqualified; married; Dispensing, Window-dressing, Photography; highest references; free. 67/12, Office of this Paper.

MANAGER; qualified; elderly; active; experienced; permanency desired. "Permanent," 4 St. Mary's Street, Broad Street, Wolverhampton.

MANAGER wants situation; up-to-date trading; experienced Buyer; used to controlling staff; Major qualification. Write, "Chemist," 116 Spring Street, Bury, Lancashire.

MANAGER (Branch); 35; abstainer; married; qualified; 20 years' experience; first-class and Store experience; near South-West Coast preferred. "Reliable" (70/19), Office of this Paper.

MANAGER; qualified; age 43; experienced in every branch of the trade; good references. "N.", 25 Mayflower Road, Clapham.

MR. HANBURY FRANCIS, Pharmacist, Clifton, Bristol, desires to find employment in Pharmacy for young Belgian (27), speaking fair English; ineligible for military service.

PART-TIME Assistant; evening work; N.H.I. "H. M.," c/o Y.M.C.A., Tottenham Court Road, N.W.

PHARMACIST (27), ineligible military service, experienced, London, West End, City, suburban, South Coast, Italian Riviera, etc., seeks permanency in high-class Pharmacy; free December 6. C. Trump, 43 Cranbrook Road, Redland, Bristol.

QUALIFIED, experienced Branch Manager; disengaged; ineligible for Army; position of responsibility desired where a man of energy and ability would be appreciated; good salary required; excellent references. Please state terms to Stansfield, 22 Sherwood Street, Fallowfield, Manchester.

QUALIFIED; 43; single; £3 week. "Statim," 1 Robinson's Place, Woodbrook, Oldham.

QUALIFIED desires re-engagement as Manager or Dispenser in London; outdoors. "Aspirin," 7 Barrow Road, Streatham Common.

QUALIFIED; 25; 10 years' experience; ineligible; London; outdoors. Stephens, 41 The Grove, Camberwell, S.E.

QUALIFIED; 29; Senior or Manager; good experience; ineligible for the Army; disengaged. Williams, 19 Morley Square, Bristol.

QUALIFIED; experienced; 34; temporary or otherwise; disengaged. "S. W.," 36 Lisbon Street, Leeds.

QUALIFIED; 21; 5 ft. 10 in.; ineligible for Army; used to good-class business; excellent references; Bath or Bristol district preferred; moderate hours essential; interview arranged. 72/30, Office of this Paper.

TWO lady Dispensers (qualified) seek temporary employment together; if Hospital, Medical Mission, etc., in London, voluntary. Miss Grohmann, 20 Woodland Gardens, Muswell Hill.

UNQUALIFIED; all-round experience; permanency; country preferred; abstainer. Henderson, Main Street, Keswick.

YOUNG lady, 6 years' Counter experience, 3 years' Dispensing, passed Apothecaries' Hall, desires position with good-class Chemist or Doctor. "E 3" (67/10), Office of this Paper.

LADY requires private tuition in treatment of Hair, Scalp, and allied Skin Diseases (theoretical and practical). "B. C." (70/40), Office of this Paper.

WHOLESALE.

CHEMIST; 38; Laboratory and General Manager; control large staff and output; free December 1. Please state salary offered, "Balsam" (69/24), Office of this Paper.

CLASS 38; qualified; languages; well up in Therapeutics and experienced in propaganda; London or district. 73/2, Office of this Paper.

PERFUMER (Manufacturing), with many years' practical experience in the manufacture of Perfumery and Toilet Articles, desires situation in England or abroad; can supply recipes; good references. 72/19, Office of this Paper.

QUALIFIED Chemist (40), disengaged half-day one week and day and half following week, is open to take up one or two commissions in London and district. Apply, "Confidential" (70/4), Office of this Paper.

REPRESENTATIVE for good Wholesale house; 30; ineligible for military service; disengaged; connection; references. Apply, "Rhei" (71/2), Office of this Paper.

TRAVELLER requires re-engagement; qualified Chemist with thorough experience of Drug and allied trades and of road; good selling record and references. "Disengaged" (70/27), Office of this Paper.

YOUNG, energetic firm, Manchester district, open to accept Commissions, Specialities or Sundries; good connection. "C. B." (71/200), Office of this Paper.

MISCELLANEOUS.

SECOND-HAND Chemists' Fittings.—We have an exceptionally fine selection of these in all sizes; prices are right, and goods are in first-class condition; we shall be pleased to supply particulars and prices. Call or write, RUDDUCK & CO., 265 Old Street, London, E.C.

BEST cash price paid for all old Cameras, any make, also all old Photo goods, no matter how damaged; any kind you may have send them along; cash will be sent same day; no waiting; we buy all and return nothing. S. E. Hackett, 23 July Road, Liver pool, E.

SHOPFITTINGS.—12-ft. Mahogany Plate-glass Serving Counter; 10-ft. Drug Fitting with Glass Labels and Knobs; 6-ft. Dispensing Screen and Counter; Desk and Perfume Case; 4-ft. Bent Counter Case; Mahogany Wall Case; £39 10s.; sketches on application. Philip Josephs & Sons, Ltd., 93 Old Street, London, E.C.

CHEMISTS' Fittings.—Second hand; large stock of high-class Drug Fittings, Piano Wall Cases, Dispensing Screens and Counters, Glass Counters, Counter Cases, Perfumery Cases and Desks, Counter Drawers; absolute bargains; cheapest house for Window Enclosures, Mirrors, Glass Shelves, Modern Shopfronts, Improvements, etc.; plans prepared; estimates free. Mills' Shopfront, Shopfitting, and Glass Facia Works, 163-165 Old Street, London, E.C. Phone, London Wall 550.

ABOUT the CHRISTMAS TRADE.—Suggest your goods as sensible for "Xmas Presents" by means of gaily coloured "Xmas Present" Tickets and Posters, and secure a rich harvest of increased business; illustrated list No. 245, in colours, showing over 100 most attractive designs, free for asking. Dudley's, Ticket Specialists, Holloway, London.

McQUEEN'S A.B.C. System of Accounts; works out profit and loss account, balance sheet, etc., with guaranteed certainty; gives exactly what Surveyors of Taxes want, and is a remedy for over-assessment; practically automatic Bookkeeping; 12th edition. Particulars and testimonials free. McQueen & Co., Moat Road West, Leicester.

10 CWT. B.P. Olive-oil Soap; bone dry; what offers? 67/28. Office of this Paper.

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WAR WANTS EXCHANGE.

The object of this section is to facilitate the interchange of pharmaceutical products which are scarce at present owing to the War, and which the inquirers have failed to obtain through the customary business channels.

TERMS

Minimum charge (including registration fee) of 1/- for six words or less; 2d. per word beyond, prepaid. Inquiries are inserted with a registration number attached to each item, and replies will be communicated direct to the inquirers by the Information Department of "THE CHEMIST AND DRUGGIST."

WANTED.

Principals having any of the following articles to dispose of are requested to notify the fact by postcard or otherwise stating quantity and price to

THE WAR WANTS EXCHANGE.

"The Chemist and Druggist," 42 Cannon Street, London, E.C.

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| Adalin tablets (enhanced prices offered) (69/19) | Bromal tablets (enhanced prices offered) (69/19) |
| Benzaldehyde (39/18) | Liantral (67/29) |
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Bona-fide buyers of the following articles are requested to communicate their exact requirements promptly to us, and we shall place them in touch with sellers:—

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| Ammon. bromid. (71/18) | Phenacetin, B.P., 1 lb., and ½ lb. (Bayer) (68/24) |
| Chinosol, 1 oz. (68/24) | Pot. bromid. (71/18) |
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| Phenacetin (71/18) | |

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5 lb. thymol cryst.; 42s. 6d. lb. 66/31, Office of this Paper.
OFFERS wanted 2 lb. bismuth. carb. "Alpha" (69/12), Office of this Paper.
QUIN. sulph., B.P., 100 oz., unopened; what offers? Sagar, Darnall, Sheffield.
WHAT offers? 8 oz. quinic sulphate. Prichard, Pharmacist, Llangsey.
4 100 B. & W. quin. sulph. tablets, 5 gr., s.e.; offers. 67/9, Office of this Paper.
QUININE, 100 oz. at most reasonable price; can be divided. 71/21, Office of this Paper.
WHAT offers? 100 oz. quinine sulph., 7 lb. ferri et quin. cit., 1 lb. soda tungstate, 26 oz. pyrocatechin. Newcome, Chemist, Grantham.
ATROPINE sulphate, B.P., 2 3j.; pot. permang., 10 lb.; sodæ salicyl., 1 lb.; offers wanted. Geo. Jelf, 261 London Road, St. Leonards.
3 doz. 1s. 3d. Amami Cream, 11s. 3d. doz.; 3 doz. 1s. 6d. boxes henna shampoo powders, 13s. 6d. doz., both less 20 per cent.; condition perfect; carriage paid. 65/11, Office of this Paper.
WHAT offers? atropine sulphate, 11 drams; morphia pure, morphia bimeconate, and veratrine pure, each 1 oz.; atropine pure, ½ oz.; the lot or separately. Keogh, Chemist, Harold's Cross Road, Dublin.
OFFERS: 4 oz. hydroquinone, 3 ½-lb. alettris cordial, 2 oz. resorcin, 8 oz. zinc valer., 4 oz. phenacetin, 2 oz. salicin; would exchange for sod. salicyl., aspirin tablets, morph. hyd. Atkinson, Rathdrum, Ireland.
WHAT offers? 100 or 25 quin. sulph. (Duncan's), 2 oz. atropine sulph., 3 oz. santaline, 4 oz. quinine hydrobrum., 8 oz. ess. ambergris, 4 oz. cocain. mur., 1 oz. migranine, 600 phenac. tablets, gr. 5. 68/32, Office of this Paper.
WHAT offers for 8 oz. phenacetin, 14 lb. acid. salicylic., 200 5-gr. sulphonal tablets, 500 5-gr. antipyrine tablets, 300 5-gr. quinine pills, 1,000 c.c. tablets amd. quinine, 2 lb. c.c. tablets antifibrin and sodium compound, 1 doz. 500's saxin tablets, 14 lb. potass. permang.? Stow, Chemist, Newton Abbot.

MISCELLANEOUS.

WHAT offers about 20 lb. stavesacre seeds; sample sent in addressed envelope. Camm, New Buckenham, Attleborough.
SOUTHALL'S Materia Medica cabinet; corresponds new syllabus; cost £3; best offer accepted. Wardle, 24 Church Road, Hove.
YOUNT window fittings, half set, nearly new; 11 aëerator syphons, charger, and 4 doz. bulbs; cash offers. "Chemist," 111 Canterbury Street, Gillingham, Kent.

WANTED.

METOL or substitute. Horrell & Goff, Chemists, Dartford.
WANTED, small cash till. State width, Roberts, Chemist, Abergavenny.
WANTED, glass-lined metal vessels for storing essences, perfumes, etc. Details and prices to 35/49, Office of this Paper.
WANTED, 50 to 100 gallons medicinal cod-liver oil for a proprietary article, for immediate use. Lowest cash price to "X. Y. Z." (72/21), Office of this Paper.
OPTICAL books; Minor, Major, Chemists' books; send prepaid for valuation; cash offers per return. Gower, Bookseller, 41 Voltaire Road, Clapham, S.W.

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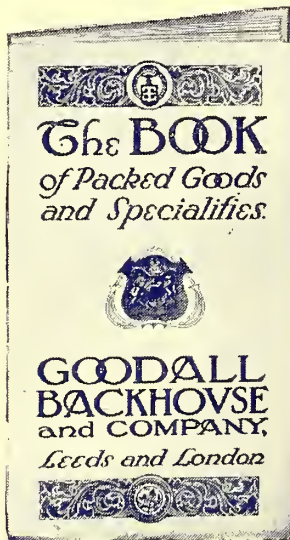
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